

THE  
PAPERS

READ BEFORE THE

American Institute of Instruction,

AT

FITCHBURG, MASS., JULY 26, 1871.

WITH THE

JOURNAL OF PROCEEDINGS.

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PUBLISHED BY ORDER OF THE BOARD OF DIRECTORS.

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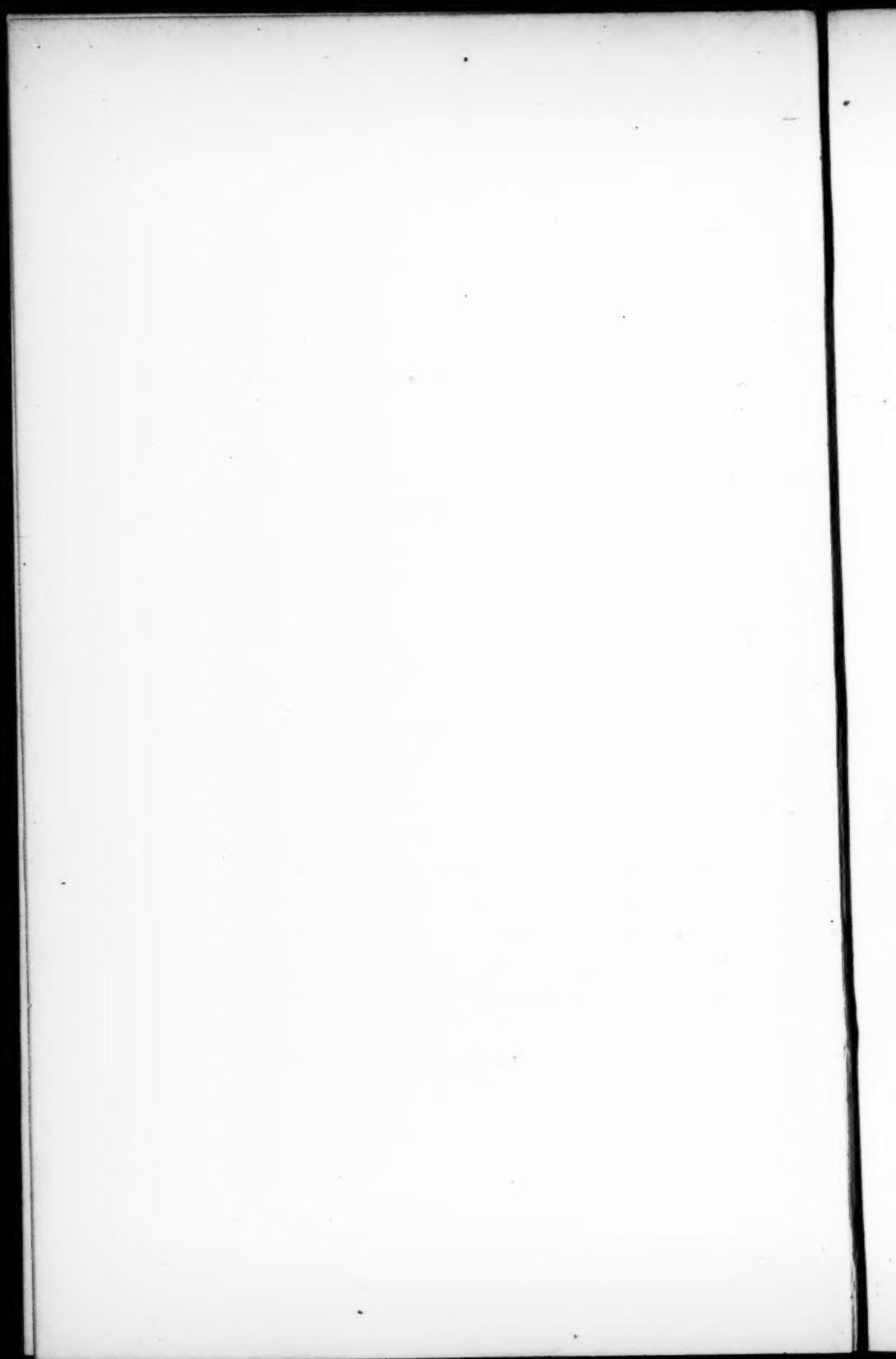
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## AMERICAN INSTITUTE OF INSTRUCTION.

FORTY-SECOND ANNUAL MEETING.

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### FIRST DAY'S PROCEEDINGS.

FITCHBURG, MASS., July 26, 1871.

THE American Institute of Instruction held its forty-second annual meeting in Fitchburg, the first session commencing at half-past two o'clock Wednesday afternoon, July 26th, in the Town Hall. The President, Abner J. Phipps, of West Medford, occupied the chair. The Rev. Mr. Jones, of Fitchburg, invoked the Divine blessing.

The Secretary read the minutes of the last meeting, and the record as read was approved.

*The President.* It was my intention, Gentlemen of the Institute, if we had been able to carry out the programme of the session by organizing this morning, to occupy a portion of the hour in speaking of the history, character, and objects of our Institute.

As the few moments that I shall occupy this afternoon will be encroaching upon the rights of others, I shall trespass upon your patience very briefly indeed. It will be sufficient for my purpose, and perhaps be for the benefit of some of the younger members of the Institute, who are not familiar with its history, if I present a few prominent facts.

*The President* then proceeded to give an outline of the past history of the Institute.

The organization originated in a meeting of Boston teachers on the 15th of March, 1830, which resulted in the choice of a committee of seven, whose duty it was to consider the expediency of forming an association, and to report. Of that committee, only two members survive: George B. Emerson, LL. D., and Gen. H. K. Oliver. The committee reported in August of the same year. A constitution was adopted, and the present name was assumed. Up to 1836, the meetings were held in Boston. Twenty-one or twenty-two of the annual meetings have been held in Massachusetts. Of the four hundred names upon the constitution at the end of the third year, three hundred were of Massachusetts men. The appropriations to meet the expenses of the Institute, not defrayed by the income from initiation fees, have come solely from Massachusetts. These began in 1835, with an appropriation of three hundred dollars. The same was made annually, with one or two exceptions, until 1865, and, from that time, five hundred dollars has been given. The aggregate of these appropriations is twelve thousand and six hundred dollars.

*Mr. Daniels*, of Boston, in response to a call from the President for any business requiring attention, made a report in regard to the action of the directors in relation to a modification of the by-laws of the Institute, and offered as the result of that action, the following amendment, which was unanimously adopted:—

“No person shall be entitled, at any annual meeting of the Institute, to any reduction of rates on railroads or at hotels, or to the published volumes of proceedings, except upon payment of such assessment as the Board of Directors may levy for the year in which that meeting is held.”

The order of exercises upon the programme was then taken up, the first being a paper by Miss Elizabeth P.

Peabody, of Cambridge, Mass., on "*Kindergartening, the Gospel for Children.*"

She showed the principles upon which "Kindergartening" was founded, and traced its development. Specimens of the work of young children were exhibited. In regard to the objection of expense, she boldly affirmed that it would be altogether more economical in the long run to begin upon the Kindergarten plan. One city, St. Louis, had recognized the truth, that the younger the children to be taught, the greater the qualifications required for their teachers, and the higher should be the salary paid them. She said in closing: —

"This sub-structure must be moral education. As the gospel preached to men who had grown up in a world lying in darkness and sin, was *repent and reform* and be forgiven; so the gospel for *children*, whom Christ pronounced already of the kingdom of heaven, and set in the midst of his disciples, to show them that before they could *enter* — much more take the highest places in it — they must become as little children, is to keep the heart diligently, for out of it are the issues of life; and form the mind in the light of that wisdom which makes life a blessing to ourself and others."

Henry E. Sawyer, of Middletown, Ct., said, so far as his observation had enabled him to determine, he had no doubt that the germ of the true remedy for much of the difficulty in common schools, has been presented in the kindergarten. He did not believe that children are naturally stupid, though teachers may perhaps complain of stupid scholars. How did they become so? Without extending his suggestions, he inquired whether it would be practicable, in graded schools, to introduce kindergarten training for younger classes, with our school-houses constructed as they are at present.

Miss Peabody thought there would be no difficulty; it

was only necessary to have tables on one side of the room around which the children can stand. It was desirable to have a piece of ground outside to cultivate plants; but for the want of it flower-pots could be employed. No teacher should have more than twenty or twenty-five pupils; children from three to six or seven years of age ought not to be in school more than three or three and a half hours a day; and during that time there should be a great variety of exercises, and these should be changed from day to day. These schools do not belong to the public school system in Germany, but are outside of it.

#### EVENING SESSION.

The Institute met at eight o'clock this evening and listened to a lecture by Gen. John Eaton, Jr., Commissioner of Education, Washington, D. C., on the subject, — "*American Education Progressive.*"

At the close of the lecture, which was received with applause, Mrs. H. M. Miller, of Concord, N. H., was invited by the President to give a few recitations. These were varied in character, and were listened to with marked attention, and heartily applauded.

[Adjourned.]

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#### SECOND DAY.

THURSDAY, July 27, 1871.

The meeting Thursday morning was opened with prayer by Rev. H. B. Blake, of Wilmington, N. C. The president appointed as

*Committee on Nominations*, — H. E. Sawyer, of Middletown, Conn.; J. S. Barrell, of Lewiston, Me.; M. C. Stebbins, of Springfield, Mass.; Ariel Parish, of New

Haven, Conn. ; G. T. Littlefield, of Charlestown, Mass., and A. C. Hardy, of Concord, N. H.

*On Resolutions*,—J. W. Dickinson, of Westfield; D. N. Camp, of New Britain, Conn., and G. T. Fletcher, of Castine, Me.

*On Teachers and Teachers' Places*,—B. F. Tweed, of Charlestown, and H. F. Harrington, of New Bedford.

*W. T. Harris*, of St. Louis, Mo., was then introduced. He read a fine paper upon "*Prescription in Modern Education,—its Province.*"

*A. Bronson Alcott*, of Concord, followed, saying:—

I need not say how profoundly I have been interested in the discourse to which you have all listened; and I shall not insult this audience by the common remark made with regard to the profession of a schoolmaster. I have seen a few more years than some who are before me. I have no doubt there have been lectures delivered before this Institute which covered as wide a ground as this; but I must say that I have not often heard the great subject of education, to which I have devoted some years of my life, treated in so admirable and so profound a manner. It makes us realize something to what a profession we belong; and if there is any profession in the world which requires the profoundest thinking, the finest culture, and all that belongs to what we call nobility of character, it is ours. We have heard in this half hour the results of the finest thinking of all the world.

This intimates to me how important it is that teachers should be superior and cultivated men and women. If the mind obeys laws as inevitable as the laws of gravitation, and all thought is governed by laws, then does not it become the teacher to comprehend those laws and obey them in the school-room? For he cannot work in an arbitrary manner. If he go against the law of

thought, the law of thought crushes him, and he makes no impression. He who invites, therefore, and calls out the mind, not he who impresses a doctrine on the mind, is the teacher, obeying the laws honestly, and taking his clew from the knowledge of the mind.

We begin to see that our individualism has gone about as far as it can ; and we begin to inquire how far we are to be guided by the universal sentiment of reason. That is, perhaps, the test which our institutions are now undergoing, and it is the test for every school. How far must I take my instructions from you ? see what you want and how to accomplish the end which you have in view against yourself ; how far are you to look to me ?

If I know anything which I rely upon and which I prize I have learned it from children. Beginning with the infant school in Salem Street, forty years ago, with children picked up from the streets, and so coming up to the higher classes, if I know anything, I have learned it by endeavoring to see how things lie in the mind of the pupil ; for if I had said, you think as I do, you look at it as I do, I might have made a mistake. How is it in your mind ? What motives actuated you ? Why did you do it ? Having that information, then, we can proceed to prescribe ; can do something for the child. We do not sufficiently, as yet, respect the child ; we take it for granted that we know. Perhaps we know too much ; we know evil. The child does not know evil ; it knows only good. And if the effort of education is to keep the child in the kingdom of heaven and preserve it from knowing there is evil, then our practice will correspond to the wants of the child. Of course, do not understand me to affirm that there are no wicked children in the world. But whose wickedness is it ? It is that of the old folks. If you could go back to the real criminal, I don't know but I would go for corporal punishment. But the old

gentleman is dead and the grandmother perhaps. The evil has come before you through six or seven generations, and the children are the mixed product of these generations.

Now, our theory is, to take the little things and say, you do this, or you do that. Knowledge of the human soul, of the human mind, of the way in which children think and feel, is the study of the teacher. I can point to five or six schools in this country, and there are many more, doubtless, in which the teachers produce miraculous results ; and I can give the reason. They are practical, and their practice is most effective for the very reason that they do command. But the teachers have ideas, and know what the mind is ; therefore, they command respect. Whoever can speak to a child can speak to an angel ; and whoever cannot do it, and draw out what is the most vital and loving in a child, is not the teacher.

*John D. Philbrick*, of Boston, said: The whole country is indebted to a man who will prepare such a lecture. What if all our teachers were studying in this way ? And I know some teachers who are doing this. I could take you into a school where the ideas presented to us to-day are seen in the concrete, where this great law of prescription is the controlling law ; and the pupils go out into the world familiar with the great work of combining and reconciling the idea of obedience to law and institutions, with the idea of independence of action and of thought. That is the solution of the great matter of school discipline. I am very glad that I have had an opportunity to listen to this lecture ; for if we are to make any progress in education in this State, we must understand the philosophy of the subject. We must seek our recreation in the study of the great philosophers and poets, and we shall gradually get an insight into the subject of education.

*Miss Peabody* next spoke of some features of the system advocated by the lecturer, which were not in accordance exactly with her ideas, though, as a whole, she considered it, to use her own words, "a splendid lecture." She then went on to speak at considerable length of the doctrines of Froebel, and of his methods as introduced in Kindergarten schools.

The next exercise was a paper by *Rev. H. N. Hudson*, of Boston, on "*The Study of History in our Schools.*"

At the conclusion of the paper, *John Kneeland*, of Boston, said there was one thing about it that pleased him. It seemed to mark a "new departure." For a long time grammar has been berated by all speakers and writers upon the subject, till it has become the best-abused of all studies. But when he heard the speaker declare history to have become "the dreariest of all studies," he felt like hurrahing for grammar. Another thing he liked about the paper. There was no mistaking its points. He could not agree with them all, as he thought history was taught better than the speaker gave credit for. He thought *Mr. Hudson's* plan excellent for young men and women of some cultivation; but he could not exactly make out from it how history should be taught to the boys and girls in our public schools.

*Mr. Kneeland* proceeded: There is a method of teaching history which I regard as useless, worse than useless; and that is, requiring the contents of text-books to be committed to memory, and recited word for word, page after page. This was extensively done, and is done in a few schools now. But generally, the method followed is quite a different one, and far better; and as far as my observation goes, I think I can assure the speaker that history is not the dryest of studies, but, on the contrary, is a study in which scholars are generally interested, and very many scholars extremely so. And I do think,

strange as it may appear, that some of the text-books are very well adapted to the wants of young scholars. I take the ground, just the opposite of that of the speaker, that children do want, first, a good outline of history. I do not think you can put a book into a school, and make that book responsible for the history taught in the school. It is the teacher who is to teach history; the book is to be simply his aid. What does he want of a book but a simple and well-connected statement of important facts, reliable facts? These may be committed to memory, in their proper connection, to the extent he pleases. It is not a bad idea to have some little knowledge of history, though one does not know all. I know some good people who were very much chagrined to hear their almost grown-up daughter ask who Columbus was. It is certainly very well for all young men and women to be acquainted with Columbus, and also with many other historical characters, even though not educated up to an appreciation of Plutarch and Shakespeare.

With the speaker, in his desire to elevate the taste of our pupils, we must all agree. With his views in that respect I most heartily concur. We spend much time in teaching scholars how to read; we should spend much more than we do in teaching them what to read.

*Rev. Mr. Hudson* had no doubt that most teachers made the teaching of history better than the books. He did not want anything to do with outlines. He would rather take a small portion of the best writers, and have his pupils read that to him, and make it an exercise in reading as well as in history. They will thus acquire a taste for history. English literature should be taught in the same way. He had all his pupils read in classes in Shakespeare; and by having them under his direction for two years, he could "stick Shakespeare so into their

minds that it will never be lost." That was the best thing that could be done for them mentally and morally, for this world and the next. Being carried through four of Shakespeare's plays, they will then go on with the whole.

*Mr. Kneeland* did not think a hundred or two of gold beads were any the worse for being strung. A good outline of the history of a country in the mind will serve to hold in their proper place and relations such other historical facts as may be afterwards learned. For instance, take a class in Jewish history. Certain events may be dwelt upon and fixed in the mind. Say, the call of Abraham, about B. C. 2,000; the Exodus, about B. C. 1,500; the building of Solomon's Temple, about B. C. 1,000; and the building of the second temple about B. C. 500. Next, the successive steps which led from one to the other; not simply as dry statements of fact, but in connected story. Now, I say that such an outline of Jewish history will be of great assistance to the learner in understanding and remembering whatever he may hereafter read in relation to the Jews and their remarkable history. So in regard to the history of our own country. The teacher will supplement the book with his own knowledge, and direct what books or portions of books are to be read for further information. Thus he forms right habits of study, and lays a good foundation for historical knowledge.

*Joseph White*, Secretary of the Board of Education, said: I was deeply interested in that paper; as a whole, better pleased than with any paper I ever heard read on the subject of history. I went through a long and painful experience in receiving instruction and teaching. The difference between the gentleman who read the paper, and my friend *Mr. Kneeland*, hinges on this question, whether in the public schools we shall teach history

in regard to a knowledge of the facts of history, or so as to invite young men and young women to furnish themselves with the facts after they have grown up? That is the principal question in my mind; and I confess that I had come, some years ago, to the conclusion that I would prefer that children should be taught some brief portion of history thoroughly, with its relations to the human mind,—learn it in good, beautiful language, and thus get a taste for reading, and a knowledge of the best way to read,—than to stock the mind with as many facts as are to be found in an encyclopædia. The difficulty with my friend's illustration is, that in his mind the beads are made of gold. If he changes the material to pewter, will he consider them worth putting on the string? I think not. I think I have seen instances where boys at an early period have been taught precisely in the way suggested by Mr. Hudson, with the most beneficial result. I have in my mind a boy who was taught in that way, and who is a rare instance of one who is not only acquainted with historical facts, but of historical relations; and there are few men who graduated at our colleges superior in their historical knowledge. I believe history, as a general thing, is not well taught. Teachers are waking up to this thing. We have some good teachers of history, who use the text-book as a mere reminder. Nevertheless, it is important,—school life is short, is crowded,—it is of all things important that a taste for reading, and a taste for reading good books, for original historical discussions, should be acquired and perfected; and then these libraries would not be filled with so many novels. It is worth more to the schools of this generation to acquire that taste, that power of discrimination, that love of the true and the beautiful, than to get all the knowledge in every text-book in existence.

It is in that view of it that I must fully coincide with

my friend who read the paper. I believe the time is arriving when we shall give more attention to this most important subject, and teach it better.

*Rev. Charles Hammond*, Principal of Monson Academy. I have but a word to say as to the importance of historical studies. With that class of young people who come to me from the public schools, to be instructed in Latin and Greek, I find there is an amount of ignorance of history that is truly lamentable; not only in relation to what my friend, Mr. Kneeland, calls the outlines of history, but even of all history. The first thing to be done is to set up bounds, limits, important historical facts, so that their whereabouts in time may be known, as geography teaches the whereabouts in place.

With respect to the class that have made some degree of advance in the study of Latin and Greek history, the best way is to teach it by assigned topics, as the character of such and such persons. And in relation to the matter of English or American history, I have found it to be useful to give out such a question as this: Was the banishment of Roger Williams from Salem justifiable? The first impression is, it was not justifiable. But here is a topic to be studied two or three weeks, and to be examined by reading all that can be found in relation to it, — why Governor Winthrop — one of the best men in the world, — wanted to banish him. Let the scholars go to every history in the library, and search; and here you have the benefit of a school library that shall contain the leading works of history. Let them study that subject and that alone, and then make up their minds and present their reasons. I find that very soon a class of young men become just as much interested in the politics of Winthrop and Endicott, as in the politics of the present day.

As to studying history from Scott's novels and Shak-

speare's plays, I have my doubts. I know there are many who have no other knowledge of history except that which they obtained from such sources. A question as to the character of Richard III. would be a fair one for an advanced class, as to whether Shakespeare represents him correctly. But I only mention this as a way that I have sometimes resorted to in teaching history to awaken an interest in historical subjects.

*Mr. Kneeland* thought *Mr. White* had hardly stated the difference between his position and that of *Mr. Hudson*. It seemed to him that the question between them was, whether one should teach the important facts of history in their connection, or some elegant statement of particular facts.

#### AFTERNOON SESSION.

The afternoon exercises were opened at 2½ o'clock, and a committee appointed yesterday to consider the future interests of the institution, made the following report through their chairman, *D. N. CAMP, Esq.*, of New Britain, Conn.:—

That they are unanimously in the opinion that the American Institute of Instruction should continue its work upon the same general plan that has been adopted during the past forty-one years of its operations. To provide for its general expenses, they recommend that aid should be solicited from the legislatures of each of the New England States, and for this purpose they further recommend the appointment of a committee, consisting of the president and secretary of the institute, *ex officio*, and of two members from each of these States.

The report was discussed for about half an hour, when it was laid on the table.

The audience were then invited to listen to a paper on

*"The Importance of Drawing as a Branch of General Education,"* by Mr. C. C. Perkins, of Boston.

Gen. Henry K. Oliver, of Salem, followed with an exceedingly interesting paper, *"How I was Taught."*

HOW FAR MAY THE STATE PROVIDE FOR THE EDUCATION OF HER CHILDREN AT PUBLIC COST?

The discussion was opened by *Hon. Joseph White*, Secretary of the Massachusetts Board of Education, as follows:—

*Mr. President:*—I dislike to speak, to open my lips, in the pretence of discussing this subject. I am utterly unprepared. I found it impossible to be here yesterday, and supposed that was to be an end of the matter. [This question was assigned for yesterday.] But, as I am called upon, I will say a few words, hoping that gentlemen who have thought more of the question will follow.

"How far," as I read, "may the State provide for the education of her children at public cost?" In the first place, Mr. President, she may provide for the education of all of them. That is one direction to which the power may reach. It is her right to provide for the education of all of them; it is her duty to provide for the education of all; especially is this true in States like ours (I refer to each of the United States), in which the government rests not on the shoulders of a few, on the shoulders of a sect, caste or class, but on the shoulders of the whole people, a government as free, probably, as the possibilities of our nature can be made in consistency with anything like stability. I need not argue this question, that without education in its true sense there can be no assurance of stability in the government, and especially no assurance of justice in the legislation of the government. I hold, therefore, that the State, that is to say, that the people, are bound to educate the men and the women

who are to take the places of the present generation; and any dereliction of duty here from ignorance, from indifference, from unwillingness to furnish the means of education, is a failure which carries death in it.

And under this head (if you will pardon me for rambling), I hold that it is not only a duty to provide the means of education for all, but to carry it out in the spirit of the parable of the gospel, and to send out messengers, if necessary, to compel all to come in and partake. An ignorant man in a republic is a nuisance. He is not simply a blot, but a sore, a carbuncle, a direct and positive mischief, and we have only to multiply these to make the republic itself leprous.

This is a duty which we have not sufficiently appreciated. These States cannot afford to let twenty or twenty-five per cent of their children obtain their education in the streets and at the corner groceries and railroad stations, and in our manufacturing establishments. (Applause.) They should come into the schools where they can fit themselves for future usefulness by learning something beyond mere reading and writing, something of their duties as citizens of a free republic.

I suppose this question refers to the extent of the education itself, rather than to the persons who are to receive it. I answer generally, just so far as needful in order to make a good State, in its best sense: just so far as is needful in order that the men and the women of the State shall be competent to perform all the duties of private and public life, all the duties of citizenship. We must not only teach the boy to read, write and cipher, but we must teach him to think. We must give him some knowledge of the relations which he sustains not only to the physical world around him, but to the family in which he is placed, to the community of which he is one, and to the State of which he is an important mem-

ber. And all the duties which grow out of these relations, and all the rights which centre in him, by virtue of citizenship, he must know, and not only these, but so much of the principles of the government under which we live that he shall not be obliged to take his cue from the morning newspaper, or from this or that party, or from one or another man, until, distracted by the variety of opinions urged upon him, he cries out at last, "Who shall show any good?" He must bring the action of little men and great men who hold official positions to the tests of the grand old principles which underlie our government, and which have come down to us cemented with the blood of the men of past times.

I know there is a doctrine advocated by some influential papers, that when a boy has learned to read and write and cipher, the State should go no further; that it is anti-Democratic, for instance, to start a High school in certain places, as for example, in Fitchburg. I have not read Democracy in that light; I hold that the High school is of all others the true Democratic one; it is the one which enables the boys and girls from the poorest families to learn all that is necessary to make them good members of a republic and of Christian society.

So I go thus far, I go further; I hold that the State may open schools in which this beautiful art, so beautifully spoken of to-day (the art of drawing), may be taught; so that the children may become artisans or painters, or poets that they may build up society in the utilities and the beauties of life and humanity. She may do that; she may do it directly, or may aid other institutions, or start new ones.

I see no objection to the State supporting any college from the public purse. There is none. If there be any to that, then there is the same objection to furnishing aid to any college supported by private munificence. She

does that ; she may do it ; and it is her duty to do it. Under our system it may be better for private munificence to do this without the public aid ; but I believe the time will come when all our colleges will be as wide open to every citizen as is now the common school. I have no objection to living in that day ; nor would I raise any objection if pupils of any color or of either sex are permitted to go there. (Applause.)

I hold that the State should do this, not simply as a means of protection, but to give strength and beauty and perfection to the civilization of the State. Hence it is, that the State may carry her aid in promoting education, to any extent and for any object best fitted for the good of the State, or do any other act for the same end. It may bore the mountain, or may sink wells into the deep salt sea to bring up pure water for the benefit of cities on its margin. Whenever the true interests of the State require aid which individuals cannot give, the State may give it.

As I have said, our system with reference to colleges, especially those which have grown up under denominational differences, where distinctive doctrines are taught, may be better left unaided by the State ; but there is nothing in the principle which should prevent the State from supporting the college absolutely, if it be situated in a place competent to do the work that the State needs. I regretted exceedingly when the theory prevailed that the State should do nothing for colleges, and I have persistently, in private and in public life, advocated, whenever the occasion should arise to call for it, the liberal appropriation by the State for all these institutions of learning. We have given to the Free Industrial School at Worcester, that last project in our modern civilization, \$50,000 ; we have given to Agassiz's Museum of Zoology \$250,000 ; we have given to the Agricultural

School \$125,000, or \$130,000, besides the funds received from the United States. And in doing so we have done well. And we have recently given to the old college at Williamstown \$75,000. Connected as I was with it, I knew that this must be done, or it would soon go down. Massachusetts has done well in this. Why should material interests absorb the thought and the powers of the great men of the State and absorb the product of our taxes, and yet our educational interests be pushed into the background? No, Mr. President, I believe the State is never so truly in the pathway of duty, in the highway of prosperity and renown, as when with a liberal hand she opens the doors to every grade of educational institutions for all to enter, giving to all her children that amount of education at least which is essential to the preparation for the performance of the ordinary duties of life.

*Gen. Oliver, of Salem.* It has been said that "To him that hath shall be given, but from him that hath not shall be taken away that which he seemeth to have." I accord with all the remarks of the secretary; but I want to draw the attention of the meeting to another class of the children of the Commonwealth than those who receive and finish off their education in the great high schools and great colleges and other great literary institutions which the State has established. The Secretary has told of the large amount Massachusetts has given to the high schools and colleges. He has well remarked that every State should be compelled to provide for the education of all her children. I assert, without fear of contradiction, that all over this Commonwealth, throughout the agricultural portions as well as in all the manufacturing centres, and in all the great cities, there are swarms and swarms of vagabond children growing up in ignorance and vice, and rapidly preparing for the peni-

tentiary or prisons. And yet the State does not enforce her laws, by which she declares that every parent shall be fined who does not send his children to school for a certain portion of the year. I am willing the State should pour out money to educate those who may reach the colleges, but more than willing that she should pour it out for the salvation of those neglected ones all over our State. But last week I entered a manufactory in one of the river counties, where I found, notwithstanding the law of the Commonwealth that no child shall be employed in any manufacturing establishment more than sixty hours in one week, or ten hours a day, and that no child under ten years of age shall be employed at all, that this law was evaded, or wholly disregarded. The law sounds very fine, and it goes before the country to the praise of Massachusetts; and we boast of the care which we take of our children, that we provide against their being overworked, or under-taught. But the law is not worth the snap of that finger; the law is violated in every manufacturing town in this Commonwealth; and it is of such a nature that there is no power whatsoever that can reach the offender and bring him to obey it. Said a manufacturer, in one of the large towns (about which I have said so much that I think my name is in bad odor there), "Here I am, employing children eleven hours a day." "Do you know it is against the law?" "Yes." "Do you intend to do it?" "Yes, we do, until the law is made effective all over the Commonwealth." That is to say, is to be made effective all over the Commonwealth; and if it is not done, they will go on, and tell us they will not obey it! That is the idea that pervades the great manufacturing towns of Massachusetts. It cannot be denied. "How old is this child?" I asked an overseer last week. Now, the law declares that if an overseer or employer of any sort shall know-

ingly — there is a hole like Mercutio's, one "not as deep as a well nor as wide as a church door," but still enough, in that word "knowingly" — or if a parent of a child (and parents have learned the limit of the law) employ or allow to be employed any child in any establishment, who is under ten years of age, then they are subject to the penalty of a fine. It is marvellous how quickly the children become ten. In trying to ascertain the age, we are told incorrectly, so that the parent stands in the way, the employers stand in the way, and between the two the little innocents are ground down in ignorance, and your towns are full of vagabondism; parents and school committees utterly ignore the thing, all of them, and superintendents of schools do not look after them; the head board of the Commonwealth does not look after them as I wish it would. There is a power that might make itself felt; there is a power that would aid us, who are struggling without any auxiliary help, that cannot be counted for its weight. What shall you do, sir? Just as the secretary has said, if these children are to be allowed to grow up in ignorance, I would not give the gas in a toy balloon for the warrant of safety to interests of the Commonwealth, and you will have the scenes of New York repeated in Boston and in the large manufacturing towns and districts. The old ones are growing up and becoming the old, stiff grape-vine, and you must take these young ones and bend them into shape. I implore you, men of Massachusetts, I implore you, women of Massachusetts, let these children be protected; leave no effort untried to put a stop to what is going on in the Commonwealth, and that is, the growing up of hundreds and thousands in utter ignorance, being fitted only for crime and a prison. I have gone through the vile streets of Boston, and I know of their degradation and depravity, and yet Boston looks on with apparent indifference.

That place of high art, that place of good men and women is filled with these abominations, and in these abominations are thousands of children growing up. Your factory towns are full of them. And although Massachusetts gives liberally to all her colleges, when we ask for the means to begin at the lower strata, cleaning it out at the source, we cannot succeed. There is no law by which you can bring an action against these violators of the law. I have tried it and failed. The law is a mere tissue of empty verbiage, and the quicker it is struck from the statute book, the better it will be ; and when a system of compulsory education shall be put into execution, that shall entirely stop this whole evil.

Massachusetts has been boasting of her laurels a long while. She had better look to them. We should do a vast deal more to justify that educational boasting. England is going beyond us. She has a system of half-time schools,—half the time in a day in school, and half the time in the mill; and England, at which we have been pointing the finger of scorn, has adopted a system which has been introduced in this country only near Springfield and partially at Fall River, which should be adopted everywhere.

So when I hear of Massachusetts giving such vast sums of money for her colleges, then I send up the prayer, Oh, that she would do for the little ones what she is doing for the great!

*Hon. Joseph White.* I think Massachusetts raises money enough and open schools enough for the education of every child between the ages of five and fifteen years. These schools are supported by taxation; our people tax themselves liberally for this great purpose. They build school-houses, and throughout the State there is a very decided movement in this direction. Large numbers of school-houses are built every year, from two to

two and a half millions being expended for school-houses last year, and over four millions for the school expenses of the State. The difficulty lies in the indisposition of the people to look at the other side of this question. We have grown up with the idea that the fathers had done all in the way of laying the foundation; they only required schools to be opened, because they knew that when this was done the children would go to them. Wherever the school-house stood the children of the people resorted to it as a general and an almost universal rule.

But things have changed, so that in manufacturing towns the population is flowing in from Canada and from across the sea; and many of these families come in to stay only long enough to acquire a certain amount of money, and then go on again to some other place. But any plan which my good friend, the General, who knows more about this matter than any of us, will devise, I will follow him in carrying out throughout the canvass. I reported on this subject until he received an office specially for the purpose, and I then neglected attention so much to this matter, out of delicacy, because I thought it was none of my business.

I believe we have got to come to this; that every child up to a certain age shall be found in schools which are required to be kept, during every month and every week of the time they are kept, until a certain age, as is the case in Germany. That is a simple rule, and the proper officers can find out the age. We have got to educate the people in this matter, that the *business of childhood*, from five to fifteen, is *to be in school*. Children are not to be brought into the world for the manufacture of cloth merely, but to be educated for a certain time in order to be prepared for the future duties of citizenship.

*Mr. Harrington*, Superintendent of Schools, New Bedford. The General has spoken a very pointed word at

the Superintendents in the State. But he knows that the Superintendents are powerless. General Oliver has said to me, "Make a case and we will prosecute." How are we to make a case? We must get an outside case; but when the overseer comes and swears that the child is of such an age we are powerless. What we want is a public opinion on this and every other subject; and for God's sake and humanity's sake, do let us do something to manufacture this public opinion. As has been said, we have been fond of boasting. I hope we shall stop. We have boasted enough in Massachusetts as well as elsewhere. Do not the statistics, of which we get foreshadowings from the coming census, alarm us? When we are told that there are five millions of children in the country who never enter a school-house, can you boast any longer? Are you not alarmed when you are told, in language that every man who knows about manufacturing establishments can understand and appreciate, that Massachusetts is training up children all through her manufacturing towns without any education, and because without any education, and because of the exposure to the degrading contacts of thus growing up with characters depraved, in rowdiness and outlawry, ready for anything, — when you have these facts are you not alarmed? I say that the stockholders in the great mills in Massachusetts and elsewhere receive their dividends from year to year, red with the life blood of this republic, through the injury done to the children who are to become the citizens of the republic! I have been astonished to find how much opposition is met with on this ground; that it is not proper, it is inconsistent with American ideas to coerce a father to educate his child. Even so prominent a man as the Superintendent of Schools in Cincinnati says in so many words, that it is probably un-American to push education as far as it is pushed under the monarchia

governments of Europe. Compulsory education un-American! What do gentlemen mean when they say such things and write such things? What is true liberty but education for the good of others? I may think my own thoughts; but when I act I am brought instantly into relations from without, and then my acts become the proper subjects of government under law. It is not only not un-American, but of all things it is consistent with the most democratic ideas, that every child should be educated, throughout the country. Let us imitate Prussia.

I know it is said at once that if you take the children from the mills to educate them the parents will starve. Then take care of the parents; but of all things educate the children! We have boasted long enough. Will liberty take care of itself? Will it do the work to get on the platform and swing our hats and talk highfalutin buncombe about liberty, as though bombastic boasting were to save and perpetuate the republic? I tell you, Mr. President, we must educate every soul, and that by laws of compulsion that shall, if necessary, take the child from the parent and put him into the care of the State. Interfere with the parental relation! Does not the law interfere with young men when it says your children must be the children of one mother? Does it not come in the shape of the constable, after he has been permitted to ruin the child, and to say, I take this child to the court-house and the prison for its offences? And cannot the law intervene between the man that begot the child and the prison, for which in its ignorance it is preparing, to save the child? Of all things let us glory in the gospel of universal education. I know that mere reading and writing is not education; but it enables men, through the measure even of such a poor education, to reach the minds and the spirits of the

people. It does not even so far protect the country. Supplement the mere reading and writing with these grander issues of which the secretary has spoken; build up your higher institutions for men and for women both; for we may well despair of good children and good men, unless the mothers of the children have their minds cultivated and their hearts aright. When we have this we may boast with hopefulness and confidence for the future of our country.

*Mr. Leander Wetherell*, of Boston. It strikes me that this is the most important topic that has come up, or that can come before the Institute, and I think the remarks of General Oliver struck the key-note of the whole subject. It has been said by the secretary before, that we have schools endowed amply for the education of all the children. I ask what odds it makes whether the doors of the colleges are open or not, if no one has power to compel children to go in? Is it not clear that we have school officers enough to enforce the law? And if they cannot do it, what is the matter? If it is in the legislation, let us know it; and if it is the officers, let us know it. It is clear that there is power enough, for the power to punish, also implies the power to prevent crime. No doubt many fear the loss of place if they strictly enforce the law. Why is the law not enforced? Is it like the prohibitory law, one that it is said cannot be enforced in the large towns, and therefore nowhere? If the law is not efficient enough, let it be made so.

*M. A. Warren, Esq.*, Superintendent of Schools, Charleston, S. C. I have heard a great deal of Massachusetts and South Carolina walking arm-in-arm, but never understood it before this discussion, for we are in the same condition down there; and I really would have thought that I was in a hall in Charleston, and that somebody was talking there about affairs in that State. Gentlemen

of Massachusetts, you must lead us in this thing. I have been interested in this matter now for some time, and I wrote to this State to get some of the laws here. We have done a little, and want to do more. Our streets are full, too, of vagabonds. There are those there who have nothing to do but to go from the street to the jail and then back again. I started a school for these in our jail. But now, when I come here, this thing about Massachusetts is unexpected. We are patterning after you, and this will not do. You must set this right; and then who knows but all down there in South Carolina may have the same privilege?

*Richard Edwards, LL. D., of Normal, Illinois.* I have very little to say, that would be of use to the institute, on this subject now under consideration. I see very clearly its profound and impressive importance. What has been so eloquently said by several gentlemen on the floor is abundantly true. If the foundations of the Commonwealth are sapped by rottenness at their base, in the ignorance and brutality of the laboring classes, especially of the younger generations among them, it seems to me that the outlook for the future has in it less of hope than we can desire. In all of our Northwestern States this evil does not, I think, present itself so strongly to the minds of men. We have less of this manufacturing interest. We have ignorance enough, but not precisely in the form that you have it. I can understand why the Superintendent of Schools in the city of Cincinnati should speak as he did on the subject of compulsory education. Our greatest difficulty is with the remnants of ancient prejudice, in respect to this matter of universal education. We have men with us, and the children of such men, who have been opposed to free schools and all things free for many generations. The southern part of Illinois was lineally descended from the men of whom Gov. Berkley

spoke when he thanked God that there were no free schools among them. This prejudice is ancient, but it is melting away; there is no doubt of it. Among many portions of our State there are evidences of a force that seems to be destroying this ancient antagonism to what is free and what is intelligent.

We have discussed this question of compulsory education, and among other advocates of this principle, has recently appeared the eminent gentleman who occupies the position of State Superintendent among us. He has come out in favor of it; many have done the same. But we have this feeling among us; that, perhaps it is interfering with the rights of American citizenship to compel parents to send children to school. If a man shows himself half a mind to do the right thing, he has an opportunity to do it.

It strikes me that the true principle is this: If it shall appear that there is really a danger threatening the Commonwealth, if the cloud really does lower with such portentous indications of a coming storm that it would seem that the destinies of the Commonwealth would be wrecked unless it is upheld by some compulsory means, then let it be done. I can well understand that in these manufacturing districts this may be the case. In the desire for wealth on the part of the manufacturer, and the dread of starvation on the part of parents, there are powerful influences that may be fatal to the children as regards intellectual and moral standing when they become men and women; and if this is the case, it is the duty of the Commonwealth to step in and say that this shall not be. It is the highest philanthropy to do it, and it is the highest wisdom to do it. If you think the hour has come, then I say compulsory education is the thing for you; and if I were a citizen of Massachusetts I would go for it with all my power; and if this state of things should occur with us, I should go for it.

I think we are a little pluckier at the West in such matters than you are. I remember, however, that in the war, Massachusetts was plucky in that. We all remember how all voted for Themistocles next after themselves; and so we speak well of Massachusetts in the war, next after Illinois. But we are a little more ready to do such things. If it shall appear to the organized mind in our State that that thing is necessary, it will be done. I have no doubt that you will do it here.

These, ladies and gentlemen, are grave questions; and these grave questions are rising continually, changing their forms as the years roll by. No sooner do you solve one of these great problems, than another, new and unknown, and perhaps more threatening in its aspect, comes in its track. Massachusetts has met these problems in ancient times, and has solved them gloriously for her honor. But this is a new one, and she must nerve her arm to do whatever is necessary to be done.

I wish I could say something that would throw light on the subject. I do not think I have done so. The question looks like a formidable one. Is it Mr. Emerson who said, "Blessed is the man who is forever on the verge of destruction?" So I may say, Blessed are the people who are ever on the verge of some chasm, on account of which they are ever called upon to nerve themselves to prevent falling in. This is your privilege. Go on; deal with it in a manner that shall show that Massachusetts has lost none of her ancient power and ancient wisdom.

*Hon. Warren Johnson*, State Superintendent of Schools of Maine. Mr. President: One of the best things I have seen for many years is Massachusetts at the confessional, as I have this afternoon. It does me good, because I belong to the family. For three years I have been trying to do something in Maine; something in the shape

of better instruction and better inspection; and in this matter of compulsory attendance. But from Massachusetts I have not had a word of encouragement. What have we proposed in Maine? In addition to town and State supervision we have county supervision; not only for the teachers and committees, but also for the pupils.

Then, after that, to get the boys and girls into the schools, we have proposed this: that every committee in the several towns shall be a committee of complaint; and when boys and girls are found not in the schools, they shall say to the constable or officer of the town, "Take that boy or take that girl and put him or her into the school." Now, you understand that parents, and especially boys, stand in fear of an officer; and when the town committee may say to the constable, "Pick up that boy," he will be regularly in school. But before that I have been trying to educate public opinion, and I have not met a body of yeomen in Maine who are opposed to it. Look at it, and walk right up to a man and say, The State of Maine takes the money out of your pocket to build that school-house? Yes, sir. Takes the money to pay the teacher? Yes, sir. What does she expect? That the children shall be in school. Are they all there? No, sir; I found one in my garden stealing fruit, the other day; and I saw one in the bar-room. Well, that boy is training for the State Prison, and the State will come to your pocket again. Every one sees that boy ought to be in the school-room. I tell you, educators, you must get hold of these people by the elbows, and put your arms right in theirs, and reason the case with them, and they will consent to compulsory education. They will not think whether it is Democratic, or Republican, or anything else. I know it is so in Maine. But I beseech Mr. Oliver, Mr. White, and the gentlemen of Massachusetts to help us in this matter of compulsory

attendance. Not fifty per cent of our children are in our common schools. The boys in our factories are crying out, We want to be men! but our fathers and these manufacturers put us into these garrets and deprive us of our manhood. So, men of Massachusetts, if you would help us in Maine, do establish this compulsory attendance on the basis that every boy and girl between seven and fourteen years of age shall be found in some school, public or private, at least three months in every year. Then, gentlemen, we shall have the next generation educated.

*Hon. Joseph White* then recited the terms of the law of Massachusetts in relation to the employment of children in manufactories, and of the tenant law, so called. About ninety of the towns in the State have adopted the latter law, and in some towns it is very faithfully executed. But in the rural towns they do not think much of it; so that even among the farmers there is trouble in many counties. Many a boy of nine years old is kept out of school to ride horse, to plow out the corn, or even to pick blackberries, and then shoved into school in the winter only. The law would not be right to have the age from seven to fourteen; it should be that every child under fifteen should be in school a certain period of time. But the trouble is there is no penalty to the town. Let it be provided that the town must enforce the law or lose its portion of the State fund, and the law would be enforced. We must educate the public to believe that childhood is to be for education, and education for some purpose. I wish that the good old days could come back when the care of the children in the schools was placed upon the clergy, and I wish that between this time and the meeting of the next legislature there might be a voice from God's ministers from all the pulpits in the State, of every denomination, upon this important sub-

ject; then the legislature will give us a law. We shall come to it; you need not fear. We boast well, it is true, and we scold sometimes. The State is conservative and clings to the things that are old; but when she moves she moves in earnest. She has done some first things though she may be last here.

#### EVENING SESSION.

The lecture of the evening was by *Prof. D. C. Gilman*, of Yale College, on "*Scientific Schools in Relation to Colleges and High Schools.*"

*Prof. Lewis B. Monroe*, of Boston, gave a series of readings, illustrative of what he considered should be the style of school-reading, to the great gratification of the audience.

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#### THIRD DAY.

FRIDAY MORNING, July 28, 1871.

The Friday morning session was opened with prayer by Rev. R. M. Sargent, of Princeton. The Treasurer's report was made and accepted. The finances of the Association were shown to be in a favorable condition.

The resolutions, reported by the committee to consider the future interests of the Institute, laid upon the table yesterday, were taken up for discussion. The first resolution was adopted with great unanimity and enthusiasm. It reads as follows:—

*Resolved*, That the American Institute of Instruction continue its work upon the same general plan which has been pursued during the past forty-one years of its existence.

The second resolution recommending the seeking of pecuniary aid from the several New England States, excited considerable discussion, and was finally rejected.

## THE CAUSES OF FAILURE IN THE WORK OF TEACHING.

*Richard Edwards*, of the Normal Institute, Illinois, spoke upon this topic, as follows: —

A good teacher, with no special facilities, and laboring under great disadvantages, would do better work, in his opinion, than a poor teacher, with the best of systems and the most complete appliances. It is in the character, accomplishments, and efficiency of the educator himself, that excellent service is to be found, if it is found at all. All over the country now the idea of the importance of universal education is prevailing, and there are abundant appliances for carrying it on. These are supplied in profusion by the tax-payers of this great republic. And although these are provided, and institutions are numerous for the education of teachers, yet there is much of failure, much of poor work. The first cause of failure specified, was the indifference and perversity of parents. It seems one of the inscrutable plans of Providence that persons should be allowed to assume the parental relation without any appreciation of its duties and responsibilities; it is one of the saddening facts of our social history and condition. Yet it is so; there are always some parents doing just the wrong thing.

The next subject mentioned as a cause of failure among teachers was a natural disqualification. Such persons should engage in some other profession. But these natural disqualifications are often over-estimated. What are the endowments requisite? Patience is certainly one, and virtue another. The man or woman who is destitute of these should not enter the school-room as an instructor. But this virtue is not one that may be discarded by the rest of humanity and made over to the pedagogical community. It is a virtue that is needed by all; the world is so constituted as to demand it; and it is

also so constituted that, when rightly used, it will develop this characteristic. Then again, how necessary the quality of hopefulness to the teacher; the results of whose labors are not seen to-day or to-morrow; they do not appear at the end of the term, or the end of the year; the fruit is in the future life of the pupil. But this virtue is required equally by all. No man can live successfully in this world without hope. The great rewards of life are in the future.

It is in the future that the civilized man lives; and when we come to the life of the Christian, and his faith, what is that but something that fastens on the time to come? As Christianity is the basis of all our civilization, as it is the stream from which all that is valuable in our social and political life has come, as it is the foundation of our social and political joys, so in its exercise upon the soul, it is the highest and noblest of influences. Therefore, every man and woman needs to cultivate for his own soul, this quality of hopefulness which should characterize the school teacher. And so it will be found that every valuable quality in the character of a teacher, is one that should be found in every person. Therefore, the teacher does not need to be a peculiar being, but only to possess a well-developed character. A man with high intelligence, a warm heart, a clear head and noble purposes, is a man who can teach school successfully. And thus it appears that there is no virtue, no accomplishment required by the teacher, which is not also required for the completion of human character. Accordingly, when a man tells me I am not able to teach school because I have not patience enough, or because I have not habits of study established, or because I am not sufficiently quick in perceiving the difference between right and wrong, my answer is, go and make yourself fit. That is what we are in this world for. We are here to fill out these vacant spots in charac-

ter, and complete our mental and moral equipment, to make ourselves full men and women.

There are many failures by teachers on account of a want of preparation. There are probably, many, even in the State of Massachusetts, who are engaged in teaching, but who have no adequate preparation; and if this is so here, how many must there be throughout the country! If there is any kind of work, which from its importance and dignity, and the vastness of the interests involved, requires careful and thorough preparation, it is the work of the teacher. It is not wonderful, therefore, that those who lack to so great an extent as many do, this preparation, make sad failures in their work.

A want of plan on the part of the teacher is another cause of failure. This is a different thing from want of preparation.

Ask the teachers what they propose to do, and many will be unable to answer. Some teachers enter upon their work with little or no thought of what they are to accomplish, and no definite object before them.

Another cause of failure is attention to some special hobby. There have been a great many patent or patentable methods of teaching that "have gone up like a rocket and come down like a stick." Some teachers have taken some one of these new methods and hugged it to their bosoms, considering it "their all and end all" of educational forces.

It is absurd to suppose that our educational systems are complete; and therefore, every American educator should be first and foremost to keep his eyes open. No man knows what is coming. Let us carefully observe the events as they come, and let us be prepared as well as we can to meet them. There has never been a civilization on earth like our civilization. It is moving on, whether improving or otherwise. It is not the same to

day that it was yesterday, and we shall only render ourselves inefficient by binding ourselves to any preconceived theories. A few other points were considered as essential to the success of teachers; and especially is the power of will needed, accompanied by a melting enthusiasm. The lecture occupied nearly an hour, and the several points presented were illustrated at length. The above is only a bare outline of the matters presented.

The next subject was a paper on "*State Uniformity of Text-Books*," by *Hon. Warren Johnson*, State Superintendent of Schools of Maine, who strongly stated the objections to the present want of uniformity from disorder, want of unity in towns, unfitness of some books, and expense. He advocated a law reducing all to uniformity in each State, and gave his plan for selection of books by a State Committee and agreement with publishers, so that the State should own the books, and furnish them as a part of the general expense of education.

#### AFTERNOON SESSION.

The Institute proceeded at once, on assembling this afternoon, to the election of officers, which resulted as follows:—

*President.* — Abner J. Phipps, West Medford, Mass.

*Vice-Presidents.* — William Russell, Lancaster, Mass.; Henry Barnard, Hartford, Conn.; Ariel Parish, New Haven, Conn.; George B. Emerson, Boston, Mass.; Nathan Hedges, Newark, N. J.; Daniel Leach, Providence, R. I.; Zalmon Richards, Washington, D. C.; John W. Bulkley, Brooklyn, N. Y.; David N. Camp, New Britain, Conn.; John D. Philbrick, Boston, Mass.; Ebenezer Hervey, New Bedford, Mass.; Henry E. Sawyer, Middletown, Conn.; D. B. Hagar, Salem, Mass.; A. P. Stone, Portland, Me.; John Kneeland, Boston, Mass.; B. G. Northrop, New Haven, Conn.; T. W. Valentine

Brooklyn, N. Y.; Joseph White, Williamstown, Mass.; Charles Hammond, Monson, Mass.; Samuel S. Greene, Providence, R. I.; John W. Dickinson, Westfield, Mass.; Merrick Lyon, Providence, R. I.; Samuel W. Mason, Boston, Mass.; A. A. Miner, Boston, Mass.; Albert Harkness, Providence, R. I.; David Crosby, Nashua, N. H.; William P. Atkinson, Cambridge, Mass.; W. E. Sheldon, Waltham, Mass.; George T. Littlefield, Charlestown, Mass.; Elbridge Smith, Boston, Mass.; F. F. Barrows, Hartford, Conn.; A. G. Boyden, Bridgewater, Mass.; Warren Johnson, Augusta, Me.; James S. Barrell, Lewiston, Me.; William C. Collar, Boston Highlands, Mass.; A. C. Hardy, Concord, N. H.; J. H. Twombly, Charlestown, Mass.; H. B. Sprague, Brooklyn, N. Y.; M. C. Stebbins, Springfield, Mass.; C. O. Thompson, Worcester, Mass.; Alfred Miller, Fitchburg, Mass.; B. F. Tweed, Charlestown, Mass.

*Secretary.* — D. W. Jones, Boston, Mass.

*Assistant Secretary.* — Alfred Bunker, Boston, Mass.

*Treasurer.* — George A. Walton, Westfield, Mass.

*Counsellors.* — A. P. Marble, Worcester, Mass.; George N. Bigelow, Brooklyn, N. Y.; M. G. Daniell, Boston Highlands, Mass.; W. A. Mowry, Providence, R. I.; N. A. Calkins, New York City; J. W. Webster, Boston, Mass.; J. N. Camp, Burlington, Vt.; T. W. Bicknell, Providence, R. I.; J. E. Edgerly, Manchester, N. H.; A. E. Winship, Bridgewater, Mass.; E. A. Hubbard, Springfield, Mass.; C. P. Rugg, New Bedford, Mass.

Geo. T. Littlefield, on behalf of the Committee on Resolutions, presented the customary resolutions of thanks.

Geo. Trask, in behalf of the people in this place, thanked the members of the Institute for coming here. He thought the meeting "had gone to the coats of the moral stomach," and was adapted for usefulness.

The President briefly responded, and the resolutions were unanimously adopted.

## RESOLUTIONS AND REMARKS IN RELATION TO MEMBERS DECEASED.

*Rev. Charles Hammond.* At the suggestion of the Chair certain persons were designated to prepare resolutions of remembrance in relation to members of our association who have died during the past year. As the other members of the Committee have left town, I have been requested to draw up the following resolutions:—

In view of the removal by death during the past year of Rev. Samuel J. May, of Syracuse, N. Y., of Prof. John S. Woodman, of Dartmouth College, and of Dr. Samuel H. Taylor, of Andover, Phillips Academy.

*Resolved,* That the fidelity and distinguished ability of these our departed associates, each in their respective spheres of labor during a long career of service, claim our respect and remembrance of them as being among the most worthy and successful educators of our times.

It is not necessary, Mr. President, for me, at this late hour, as so many members are absent, to say anything particularly of these our friends. I know nothing of the first-mentioned, Rev. Mr. May, except as to his general character. I know very little of Prof. Woodman, except what we all witnessed two years ago in his admirable presentation of the science of drawing, when he proved himself to be proficient in his department.

Of Dr. Taylor, it would seem unnecessary to make any extended remarks in portrayal of his character, inasmuch as the work of formal eulogy has been done so faithfully. I will say only a word or two in reference to him. One thing was his marked individualism in all respects. We shall not see his like again among the children of men. No one can take his place. It is not reasonable to expect that anybody shall be such a teacher

as he was. It is possible, but not reasonable to expect that anybody should imitate him, even as he was an imitator of no other person. He was not formed for his work by any prescriptive rules; he was not indebted to any normal institution for making him what he was. I think that men of eminence are born for their work, not made, as the poet says.

Another point in relation to him is, that there was conjoined with all the ordinary qualifications of good instruction, perfect knowledge of the studies, large discourse and broad learning belonging to other departments than his own; a great character that impressed itself on the mind of his pupils continually; so that they ever felt that he was a man far above them, bringing the relations of learning, as well as learning itself into his instructions. I was always impressed with that trait of Dr. Taylor whenever I saw him, or heard him read any paper before a meeting of teachers.

Another point is, the affluence of wealth that belongs to such a character in such an institution, sending out influences not only for the present, but going on undiminished in their impression and power. He held on to his work in that one place, without a desire to change. It was because he worked away in that one place and one position that he attained such an influence as no professor had in any college. I verily believe he was a more useful teacher in that department than any one professor in any college. So, it is not the place that makes the man, but it is the man that makes the place.

*Mr. Kneeland.* I would like simply to indorse the remarks made by Mr. Hammond in regard to Prof. Woodman. My acquaintance with him was made at the Portsmouth meeting of the Institute. His lecture there was the most eloquent and practical one on the subject of *drawing*, I had ever heard. He afterwards rendered

good service to the cause by his lectures and practical exercises in other educational associations.

Not many of the present members of the Institute, I presume, knew Mr. May as a prominent worker in the educational field. In the early days of the Institute, there were few more earnest and zealous than he in awakening the people to a sense of their duties in regard to education. He was settled as a clergyman in South Scituate, Plymouth county; and with the Rev. Charles Brooks, then of Hingham, and Ichabod Morton, of Plymouth, was largely instrumental in bringing about an educational revival in that county; and in the establishment of the Normal school at Bridgewater. Those connected with the early classes in that school will remember with pleasure his frequent visits.

He was strongly opposed to corporal punishment all through his life, and labored zealously to bring about its disuse.

When Father Pierce was obliged to leave the Lexington Normal school (now Framingham), on account of his health, Mr. May was invited to take his place. He accepted the charge, and carried on the school with great success until Father Pierce's return from Europe with restored health. He then returned to his pulpit ministrations.

During the latter part of his life he was settled in Syracuse, N. Y., where he took an active interest in the schools, and a leading part in their management.

*Mr. Joseph Allen*, of Syracuse, spoke of Mr. May in terms of the highest praise, of his kindness as well as his courage, his humility, his devotion to the interest of the schools of Syracuse. Perhaps no one had more to do with the establishment of Cornell University than he. He was a constant and confidential friend of Gerritt Smith.

When he taught a common school in his youth, he did practise corporal punishment, and came near being fined for whipping a boy. So did Father Pierce whip once. But he whipped enough to see the evil of it. Mr. Allen continued at some length in detailing the characteristics of Mr. May, in a very eulogistic manner.

*Rev. Mr. Trask*, of Fitchburg, followed, giving some reminiscences of Mr. May, and dwelt more particularly upon his course in relation to slavery.

*The President* referred to the relations he had once held as an associate of Dr. Taylor as an instructor in Phillips Academy, and said he would be delighted to dwell upon the many excellencies of scholarship and virtues as a man, if time permitted. He would, also, gladly speak of Prof. Woodman, whom he knew well. He would state as a fact that showed his attachment to the institution with which he was so long connected; namely, that in his will he had left \$20,000 for the Scientific School of Dartmouth College.

*George A. Walton, Esq.*, of Westfield, could not do justice to himself if he did not speak for a moment of Mr. May. Mr. Kneeland had spoken of the incident of Mr. May's going to take charge of the Normal School at Lexington. I first became acquainted with him, indirectly through a female teacher who had been a former pupil of his. I subsequently knew him more intimately when he stood in his official capacity as clergyman in the presence of the same parties, which was an occasion of special interest to me; and I know that that female teacher would not forgive me if I omitted to say a word in regard to him. Mr. May was said by a philanthropist of New York, to be the most Christ-like man he had ever seen. I think the person to whom I have just referred has the same feeling, for at the time of his death she said, "Now that the dust of Mr. May has mingled with the earth, its

dust is more sweet; now that his spirit has entered the heavens, that place is more desirable for me. I wish that might be said of all of us by our pupils when we cease from our teaching here.

The resolutions were then unanimously adopted.

N. A. Calkins, of New York City, read a carefully-prepared paper on "*Does Object Teaching hold a Philosophical Relation to the Natural Development of Mind and the Acquisition of Knowledge?*" This he argued affirmatively, maintaining that object-teaching furnishes the best conditions for obtaining the best results in education.

#### ADDRESSES.

*Ex-Gov. Washburn*, of Cambridge, a member of the Board of Education, being called upon by the President, spoke as follows:—

Mr. President,—I came here to show my appreciation of, and to enjoy the meeting of this Institute; and having done so, I do not recognize your right to call upon me for anything further.

I have been too long connected with this Institute to come here at this or any of its meetings, however, without being interested in its work; and, knowing how much it has done for the cause of education in Massachusetts and New England, and beyond it, I confess I heard with regret that there was a supposition on the part of any one that the Institute might be given up; that some thought other associations had taken its place, and therefore its meetings might be discontinued. I hope, for one, that that thought will not be entertained. I believe it *has done much good*, and that, if for no other reason, it should be kept alive for the good it has done. But, more than that, I believe it has the capacity still of doing so much good that the country cannot afford to be without it.

I have had an opportunity to watch and to observe a little, outside of my own immediate neighborhood. A feeling of interest in the subject of education has grown in the world in favor of public and free education. And knowing, as I do, how much Massachusetts, how much New England and all their educational associations have done in spreading abroad that feeling of respect for, and appreciation of, a free, public education, I should regret most deeply that Massachusetts or New England should ever take one backward step, for fear of the consequences or influences beyond their limits.

Sir, it was my privilege a year ago to be where I was witnessing, and had an opportunity to observe, the general expression of interest that was felt abroad upon the subject of public education. It seems that Europe has at last found out how it is that she must reach that degree of civil liberty and public happiness that she has been envying the United States for, so long; she has found out that it is by means of public education.

In Italy I was told by the Minister of Public Instruction, who is a member of the ministry of the king, that within the last four years they have established in every portion of Italy a free school, and have over sixteen Normal schools. And now that we know Italy has broken away from the influence of the Pope as to matters of education, we cannot but congratulate her on the progress she has made.

But more marked than that was the discussion which was going on in London on the subject of free schools in England. The influence of America has been felt in England, and is moving it to the very centre; and efforts have been made, especially within the last year, which indicate that they have now become convinced of the absolute necessity, if they would keep up with the rest of the world, of establishing free schools. The struggle

was a long one; they had old prejudices, religious prejudices. They had an idea that was so prevalent, and so tenaciously held, that religious instruction must be inculcated along with general literature, and it was almost impossible to overcome it, until they began to be convinced by the political progress, that sectarian teaching must be laid aside, and that the doors of the schools must be open to all. And this is the most important fact that has occurred in England for a long time, and will do more to carry out the true republican principles that have done so much to elevate America, than anything whatever.

And this leads me to speak of the subject that was discussed yesterday, as to the necessity and importance of educating all classes here, educating them as they are now doing it in England, — not limiting it to mere voluntary action, but requiring it to be done. Sir, I know this subject has been discussed a great deal, the question whether we have a right to take the child from his toil and put him to school and thereby fit him to be a man, and a good citizen of the Commonwealth. Now, I have no more doubt of that than I have that government has a right to protect itself. (Applause.) You do not hesitate to take a grown man from his business, and call upon him to yield his private business for the general good. I hold that the parent does not own the child, as if a slave. God has placed us in families; society has thrown its protection around families; but parents forget the corresponding obligation to educate the children whom God has given. They ought to be taught that government has a right to take these children from them if necessary, to fit them to become useful men and women in society. (Applause.)

Sir, the great defect in our system is this; that there are no means provided by which a large class of our chil-

dren may be so controlled that they cannot escape from the schools, and from acquiring any education. They are now growing up, dangerous members of society. Why, sir, in Boston, I see by the returns of the Superintendent of Schools, there are more than 7,000 children that don't go to school at all; in Massachusetts there are almost 30,000, of school age, that are in no school. How are they growing up? Your children who can be well dressed can go to school; but take the children who are growing up in the streets, who have no parents; or, if any, those who are worse than none, and have no chance for acquiring an education, and what are they to do unless a greater effort is made to compel them to attend school? I think I see daily as many as thirty young children in Cambridge, near my office, where a public work is going on, who are constantly employed in driving carts backward and forward. Now if these children are to be allowed to grow up without education, what is the consequence? Is society safe? Look abroad; see the condition of society there. Sir, it seems to me that something effectual ought to be done.

Now I come back to the point at which I began. This institution is a power in this land. It is not the men who are in business, who have no opportunity to study this subject, or the mechanics, who have no access to the public, that can instruct the people on this subject of education. But it is the teachers, those who are connected with this and kindred associations, those who are actually engaged in teaching, who can make known to the public what is proper to be done; and it is their duty to do it. The arguments that they can urge will be a sure means of carrying conviction to the public mind, so that something will be done.

In what condition shall we be hereafter? Foreigners are coming here by thousands, without education; their

children have no desire to study; the parents have no disposition to send their children to school; their early associations have given no impulse for mental improvement, and we are in danger of falling into a condition which the lover of his country must shudder to anticipate. Instead of doing all that should be done for saving the young and making them good citizens, we are shrinking from the work of compelling them to attend school; we are nursing a class of ignorant ones, too many of whom will almost inevitably become paupers or criminals in the community.

It seems to me, that, constituted as this is, with these great questions before the public, — questions vital to the best interest if not the life of society, — it is a duty that each member should take upon himself, and should carry home with him as an undoubted conviction, that we have not yet reached the stage in popular education that we must attain to, for the best welfare, prosperity, and blessing of the Commonwealth. (Applause.)

*David H. Mason*, of Newton, United States District Attorney, and a very active member of the Massachusetts Board of Education, was next called upon.

After speaking of teachers, their criticisms of each other, their work, and showing the great gain in the amount accomplished by our schools, he proceeded as follows: —

If I were to speak of our system as being deficient in anything, it is that it does not involve technical education. We have developed men and women. They have the fundamental principles of knowledge; they have the principles of science; they go out with independent minds, but without any knowledge of what they are to do in life, what pursuit they are to engage in, and without the practical scientific knowledge necessary to enable them to enter upon the active duties of life;

and then they have to begin an actual apprenticeship. Our boys that go from our high schools must spend five years in the art of merchandising to learn that art. In Antwerp there is a school of nine hundred persons learning the arts of weaving and dyeing. A child who graduates from the public school goes to the technical school to learn the arts; and within five years, two thousand five hundred have graduated from the Antwerp schools, which have done more than all other things to raise that province above all others, in this respect, in the civilized world.

Our Yankee men and women, after having attended school for the proper period, have to choose what they will do, and then prepare for it, and then do it. As long as we had only the small number of people of the early period of our history, this might do; but now that we have this large extent of country, with forty millions of people, we must attend to business and manufacturing; and not only have agricultural schools, but scientific schools for training in every department of life.

I have had the gratification, within a few days, at Worcester, of seeing the first graduate in North America in the art of dyeing. They say we cannot dye at all in the United States; that the atmosphere affects the colors. Is that so? In Germany and other parts of Europe they have schools where scholars have the advantage of three years' instruction under the best of teachers; then they serve an apprenticeship, and then can practise the art. But how to engraft this on our system it is difficult to tell. Can we do it and preserve our Yankee independence,—our New England determination of will? We must do all that the schools now do, and must add the other, or we cannot take our place in the business world.

*Nathaniel Allen*, of West Newton, who had just returned from his two years' residence in Europe, responded to the President's call, as follows:—

The subjects presented by the gentlemen who have preceded me are of very great importance.

Two years ago, after making my arrangements to spend two years with my family in Europe, my friend, Dr. Barnard, was kind enough to commission me to visit the schools in various foreign countries, which commission was renewed by Gen. Eaton.

Spending the first year in Germany, I am happy to state that I had an opportunity to visit the schools, from the lowest to the University, in nearly all the States of Germany. It is true that we have much to do to raise our schools as the gentlemen who preceded me have said, and the people are ready for this. But who shall inaugurate these changes? Those two gentlemen who have just addressed us, occupying the positions which they do, with their Secretary, are in the exact position to inaugurate these reforms. We know what was done by Horace Mann: how he vivified and electrified the whole community. And though the wave of progress has gone steadily on since his time, it has not reached high enough; and to-day, if the work could be started by the Board of Education, through their Secretary, we could accomplish all that is needed for technical schools. In the countries of Europe, I have visited these schools. They were first started in France. In England they have also succeeded. In South Kensington, a centre of influence, there are two hundred young ladies attending to drawing, working upon machinery. There is an immense amount of work to be done in this country in educational reform. Not but that the schools of Massachusetts will compare well with the schools of any country; for England has not completed the reform by any means; she is in the very heat of the battle. Those gentlemen who are working for this reform in England encounter mountains of prejudice which they do not

expect to overcome for years. Mr. Foster told me, "We are making a beginning"; and Mr. Mundella, who visited you last year, thought you were fifty years in advance of them.

The meeting was then closed in the usual manner, by singing the *Doxology*; "Be thou, O God, exalted high," etc.

" 'TIS MORE THAN SIXTY YEARS SINCE,"

OR

"HOW I WAS EDUCATED."

FROM SIX TO FOURTEEN.

BY HENRY K. OLIVER, OF SALEM, MASS.

" 'Tis Sixty Years Since," is the supplemental title given by Sir Walter Scott to his first novel, "Waverley," a production which at once placed him in as high rank in fiction, in prose-writing, as he had already attained in poetry. This substitute title, he declared to be a matter of "much more difficult election than the main title, as it seemed to pledge him to some special mode and time of laying his scene, drawing his characters and managing his adventures ; the object of his tale being more a description of men than of manners." " 'Tis more than sixty years," that I go back, in attempting a description of the educational men and manners of my boyhood, and in recording some reminiscences of the mental and bodily discipline I underwent in about eight years training, from A B C, to Harvard College, say, — from 1805, — when I began to learn the alphabetical mysteries, to 1814, — when Alma Mater took me into her embrace, gave the first taste of her love, and nursed me with her classic food.

A short distance above Milk street, in Boston, — and a less distance above the old "Province House," the former residence of the royal governors of Massachusetts, "in good old Colony times, when we were under the king," — on Marlborough street, now called Washington,

stood my father's house, to and from the barn of which, in the rear, I daily drove my father's cow from Boston Common through Bromfield's lane, now promoted to the rank of a street ;—an easy matter in those days of Boston's smallness, but to-day a hopeless impracticability.

Not a vestige remains now of any of the buildings then familiar to my sight; tho' the Province House yet stands, but hidden from view by brick buildings erected upon the lawn which separated it from the street. No Boston boy of my times will forget the oft-repeated saying, that whenever the Indian, elevated on its cupola as a weather-cock, *heard* the Old South clock, on the opposite corner, strike 12, he let fly an arrow from his bow, and at once armed it with another. But to the school story.

In the year 1805, or thereabouts, being then something under five years of age, I was first placed under educational influence, consigned to the care of one Mr. Hayslop, who, with his wife and widowed daughter, one Mrs. Hurley, kept school in an old building, long since demolished, standing on the northerly corner of Franklin and Washington streets. Well do I recall its looks, the old time-stained walls of wood, its old door, its old stairway, up which our little feet bore us to the old school-room, on the second floor, where ruled and feruled the good old master, for he was both old and good, with his gentle helpmeets,—worthy pebble,—very poor, but most respectable folk, who had seen better days, and whom old friends patronized for old friendship's sake, and to save them from deeper want. Ah! gentle old gentleman, the days of the years of whose life, were you now living, had been like Jacob's, an hundred and thirty years,—with your old square-toed shoes, and ponderous buckles thereon, your old grey stockings, your old tabby-velvet breeches and knee-buckles, with their silvery shine, your vest of exaggerated length, your ruffled shirt, your seedy

old coat, reaching clear down to your shrivelled shanks, with ample girth and pockets deep and vast, your neatly ironed stock, and powdered wig:—long since have you reached a home in that blest place where bad boys cease to trouble and the schoolmaster is at rest, at this late day,—

"To dumb forgetfulness a prey,"—

save possibly in the dim memory of some youngling of your guidance, like myself, surviving the little group that daily clustered about your knees. By him was I taught my A, B, C, D, E, F, G, my a, b, abs, and my e, b, ebs, after the old, old way,—praised because ancestral,—the old gentleman holding an old book in his old hand, and pointing, with an old pin, to the old letters on the old page, and making each of us chicks repeat their several names, till we could tell them at sight, tho' we did not know what it was all for. We must have been a bright set, excellent of memory, for by this excellent old method, and with the excellent old books of the old times, and the excellent old teacher, and our own excellent young wits, we were not more than four or five weeks in acquiring complete knowledge of the twenty-six arbitrary marks constituting the English Alphabet. To be sure, I learnt the names, family and Christian, of all my fellow-scholars, and they were quite a host, in a week; but that was, as it were, naturally,—by instinct, as Falstaff knew the true prince,—while to learn the letters, must only be done after the good old fashion of the ancestral teaching, the teachers of those days holding faithfully to the first line of Pope's couplet:—

"Be not the first by whom the new is tried,"

And wholly ignoring the second,—

"Nor yet the last to lay the old aside."

— *On Criticism*, II. 335-6.

I recall but one instance of severity at his hands, and that, like many other calamities, proved to be a blessing in disguise. For some roguery of mine, — and rogueries many and follies many marked my child and boy life, — the good man shut me up in a closet "black as Erebus and deepest night";

"No sun, no moon, all dark, amid the blaze of noon."

Quivering with fright, I stood motionless, for some time, in the murky gloom. But, blessed with keen nasal powers, I thought, as I became more calm, that I smelt some "odious savors sweet," and following out the suggestion, I found that I was incarcerated in a store closet, wherein were boxes of sugar, boxes of cake, and boxes of toothsome things in general, to which I paid the fullest attention, — until I was quite surcharged with dainties. When the door was opened for my release, I rushed out, and conscious guilt urging me to rapid flight, like a surfeited honey-bee heavily laden with stolen sweets, I made a straight line for the native hive, considerably worse for the gorging. I forgave Master Hayslop's severity, and should have forgiven many repetitions of similar imprisonments.

From this school I was removed to another, Madam Tileston's, in Hanover, below Salem street, of the same general character, where I was taught elementary reading and spelling, after the same ancestral fashion; — that is, I received about twenty minutes of instruction each half day, and as school was kept three hundred and sixty minutes daily, I had the privilege of forty minutes' worth of teaching, and three hundred and twenty minutes' worth of sitting still, (if I could), which I could not, — playing, whispering, and general waste of time, though occasionally a picture-book relieved the dreary monotony.

My nervous temperament, dislike of confinement at

busy nothingness, want of affection for books, — slates then we had none, — love of mischief, and general habit of fidgetiness, often entitled me to Madam Tileston's customary punishment of sundry smart taps on the head, with the middle finger of her right hand; — said finger being armed, for its own defence, with a large and rough steel thimble. Once trapping me in some naughtiness, she pinned me fast to the cushion of her chair, and following the principle of retaliation, I impaled her by her dress, to the same substance; so that when, shortly after, she arose and moved, it was a triplicate transit; and the three-fold firm of Tileston, Cushion & Oliver, changed its base. Both of these teachers taught as well as they knew how, — and that was as well as the times in which they lived and worked, permitted them to know. Nobody taught any better, as far as I have learnt. Nor was there anything like the philosophy of teaching known or thought of, so far as I can now judge on retrospection, by any teacher into whose hands I fell.

The subject of education excited then comparatively little interest. The public mind had not been then roused to its present wakefulness. Horace Mann was but a lad. State Boards of Education were not created till very many years afterwards. Teachers' Institutes, and Teachers' Associations, and Normal Schools, had not yet approached near enough to existence, to become subject of prophecy, hope, or even thought. May none of these, through any cause, slight their great duties.

There were no schools systematically graded; there were no blackboards; there were no globes, nor other ordinary school apparatus in schools I attended. I never saw a full-sized map, nor illustrative picture of any sort suspended against the school walls. There were no Warren Colburn's nor Walton's Arithmetics and Algebras; and the method of teaching the science of numbers was utterly unscientific.

I shall never forget the ineffable mystery that enshrouded in Egyptian darkness, the "Rule of Compound Proportion," in that marvel of obscurity called "Walch's Arithmetic." This mystery involved the method of so arranging the *five* given terms of a problem, as to get, by a slate-pencil process, the *sixth*, or unknown term. I was told by the *rule* to arrange these five in a certain order according as *more* required *more*, or *less* required *less*, or as *more* required *less*, or *less* required *more*, and then to multiply some of the terms, and divide their product by the product of the rest of the terms, and I would get the answer. To my unmathematical brain, it was a muddle that nothing cleared up till I got hold of Warren Colburn's peerless book. Geography was studied but sparingly, and from very defective books, and mostly without maps. Schoolhouses, school-rooms, and school furniture, were all at the lowest point of inconvenience, and I regret to say, that many years passed away before substantial improvements were tolerated. And even now, there are too many instances of continued and immovable conservatism in these matters. Children were huddled together in small, close, unventilated apartments, regardless of both health and comfort, and of those proper surroundings of seclusion and stillness, that render study a success, and successful teaching practicable.

With the single exception of Phillips Academy at Andover, every school that I attended was in a noisy neighborhood, and looked out upon crowded thoroughfares; though to be sure there were no shrieking steam whistles, nor thundering locomotives, with trains of linked uproar long drawn out, stunning and deafening your ears with their rattling larums. The outlying premises were narrow, noisy, and nasty; for in the cities ample play-grounds could not be granted,—real estate being too

valuable. Nor were recitation-rooms attached to the general schoolroom. In this room we sat, we studied, or idled, or we recited, or were flogged, as the case might be. So that between the processes of keeping order, watching the boys, hearing lessons, and answering questions, mending pens and setting copies, and all that, the master had his hands and his head full of work. It is a wonder that any of them lived a twelvemonth outside the walls of an insane asylum.

Corporal chastisement was in full tide of successful experiment. Of the eight different teachers under whose care I fell before I entered college, but one of them possessed any bowels of mercy. He hit me, but in a single instance, and that was for the crime of having my left leg a little out into the passageway between the desks. This was done with a stoutish piece of rattan, though the flogging instruments mostly in use, were the cowhide and the ferule, the latter an instrument now, I believe, extinct, and the name of which was, I suppose, derived from the Latin word "*ferulus*"—*a little wild beast*—as indicative of the savage ferocity with which it was applied to your hands, and elsewhere. To the fact of the existence of these implements of torture, and of their frequent and indiscriminate use, I can testify, without mental reservation, before any justice duly authorized to administer an oath.

Though vividly recollecting very many school incidents, there are some matters of which I have no remembrance whatever. I do not remember that my powers of perception or observation were ever awakened, or drawn out, or cultivated. I do not remember that my attention was ever called to the consideration of any object, great or small, in the great world into which I had been born, or in the little world by which I was surrounded. I saw the great Solar Eclipse in the forenoon

of June 16th, 1806,—when my father's hens went to roost in the barn, and the cows on Boston Common gathered at the gate to start for home,—“*sed non uberibus plenis*,”—but nobody ever told me by what means that great and unwonted obscurity came to pass,—ere the sun had reached high noon,—or how it was that the sun of that day twice left the earth in darkness. As I groped my way in the gloom of this eclipse, so I groped my way through the dingy cloudiness of my early and late school-life; and this most pitiful and pitiless omission and neglect, affected all my future studies; and, in fact, much of my after life;—for my mind became, in later years, not a little inquisitive, and I longed to know more of the things about me, and their causes and origin,—the why and the wherefore of things; and had my perceptive faculties been properly educated, my strivings after knowledge had begun earlier, and had been vastly more productive.

You will, therefore, see that object-teaching, now most wisely considered to be of the very highest importance, was then not only ignored, but was not even thought of; object-teaching, that comprises within its grasp all of the infinitesimal that the microscope can reveal, and all of the infinite that the telescope can discover from out of the vast fields of measureless space.

Reaching the age of nine years, it was deemed to be time for me to commence my “*Singulariter Nominativo, hic, hæc, hoc*,”\* and this I did under that most worthy and venerable gentleman, Master Ebenezer Pemberton, L.L. D., New Jersey College, Princeton, 1765, who taught a few pupils at his private school, on the corner of Short (Kingston) and Pond (Bedford) streets. The book first placed in my hands was the Latin grammar of Dr. Alexander Adam, a very learned classical scholar, of Edin-

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\*Merry Wives of Windsor, Act. II., Sc. 1.

burgh, who succeeded in compiling a very good grammar of its class, and a book of Roman Antiquities, rigidly correct and extensive in statistical details, but as dry and dusty as the deserts of Egypt.

Of the faults of the grammar, subsequent compilers of Latin grammars have eloquently discoursed in their prefatory commendations of their own books; such being the general habit of the craft.

It was, however, long kept in use, especially after its improvement and enlargement by Mr. B. D. Gould, of the Boston Latin school. I would not, however, use it, nor any other book of its class, because that class is adapted for the teaching of Latin by a method which I believe to be in conformity with neither nature nor common sense, or at all calculated to interest the learner, or to allure him on, day by day, and lesson by lesson, in his early attempts in the language. I say "allure him," for I am persuaded that those are the best methods, and those the best books, whereby and wherein the several subjects to be learnt, are presented in simple and attractive manner; and they are the wisest and best teachers, and will therefore best succeed in their great vocation, who present these subjects to learners in a manner to interest them and to keep alive that interest, quickening it, day by day, and lesson by lesson, and so actually charming them on in the path of knowledge; making them to believe, to see, and to realize, that "wisdom's ways are ways of pleasantness, and all her paths are peace."

Immense positive mischief has been done to the cause of learning, and utter disgust been often generated in the minds of learners, by unwise books and unwise schoolmasters; for there are both books and schoolmasters unphilosophical in method, and unwise in detail; and there are teachers without sympathy in heart, or in

manner, or in mode of teaching, who seem to cling religiously to old ways of scholastic discipline and instruction, and who drive their pupils blindfold along an unseen path, and by methods, for the time, at least, utterly incomprehensible.

Now this grammar had a very great fame, and was a big thing for so little a fellow. It was to be committed to memory, from “*tittle*” to “*finis*,” before my littleness was to know what it was all for, or my puny intellect made to comprehend that such was the approved and time honored method of acquiring all languages, *excepting my own*. That I had measurably mastered by a totally different process; and so, I suppose, did Adam and Eve, and vast number of their descendants, up to the time when some long-headed and sharp-witted genius had originated the idea, that in attaining a language, nature’s methods were all wrong; that theory must precede practice, and that learners must toil through all the gloomy bewilderments of the “art of speaking and writing correctly,” — as grammar is usually defined, — before being permitted to put a single principle detailed therein into practical illustration; paradigms and rules, forms and formulas, were all to be securely clinched into the memory, as prerequisite work to the entrance upon any of the actualities of the language unravelled.

But such was the then method of teaching; — a method derived from the English schools, and by them from monkish ages, and yet in use in these schools, — the ancestral method, “having smart relish of the saltiness of time,” and therefore the true method to be applied to all languages, excepting one’s own mother-tongue, as I have just said; which same mother-tongue, when it had to be taught by Latin mothers to Latin boys and girls, was, doubtless, taught pretty much as English mothers teach English to English boys and girls.

So then, month after month, with an Abrahamic faith in Master Pemberton's assurance that it was all *right*, literally "going it blind," I toiled on, forenoons and afternoons of dreary monotony, through the muddling unintelligibilities of this joyless book, with its fearful array of rules and exceptions for nouns, adjectives and verbs, its rules of syntax, and their multitudinous exceptions and blurry examples, from the most lucid Latin authors, at last reaching, with joy unspeakable, the fifty-second and last rule,—the "Ultima Thule" of the *Ablative Absolute*,—wherein I was taught that this ablative was called *absolute*, on account of its independence of any other word, although, says illustration No. 5, it is really governed by a preposition not inserted in the text; so that, after all, it is not quite absolute, but is under some covert prepositional sway, itself a despotic monarch, controlled by a prime minister behind the curtain.

This grim and melancholy work was only relieved by an occasional lesson in spelling, from a now fossilized dictionary by one Mr. Perry, and a weekly exercise in declamation.

Our master was an admirable reader and speaker, with a clear, rich, and full voice, and much grace in gesture. The several pieces we spoke, he first declaimed himself, and then we followed in imitation; and it was pleasant to see how entirely he ignored all the artificial rules for gesticulation laid down, with illustrative diagram, in a well-known book of those days, called "Scott's Lessons," which was the standard work for schools in the department of elocution. Scott told us, that on commencing a declamation, after the proper customary bending of the body forward at an angle of  $45^{\circ}$ , by way of salutation to the audience, the speaker must first poise himself carefully upon his right leg, stretch out his right arm and hand at an angle of  $45^{\circ}$  from the body, and then utter his

first sentence. This done, he must poise himself with equal care upon his left leg, and give utterance to his second sentence, with his left arm and hand extended at a similar angle of  $45^{\circ}$  from his body, and so go on, *vice versa*, right and left leg, right and left arm, at  $45^{\circ}$ , — no more and no less, — to the end of the speech, like the vibrating beam of an elocutionary steam engine. Speech done, the legs were to be brought decorously together, heels and toes out  $45^{\circ}$ , arms and hands dropped to the side, and the body and head gracefully inclined towards the audience, at an angle of  $45^{\circ}$ .

Thus toiling on, I reached the age of ten years, and all I knew, was how to read pretty well, how to write and spell pretty ill, how to declaim pretty well, and the orthography, etymology and syntax of Dr. Adam's Latin grammar pretty ill. I could sing by rote, a good many Psalm tunes, and a few Anthems taught me by my mother and the chorister of the Park street church, Mr. Duren, where I sang treble with the girls, not dreading Jack Falstaff's fate of "spoiling my voice a singing of anthems."

Of geography and arithmetic I literally knew nothing, and less than nothing of the grammar of my own language; though, thanks to the accuracy with which my father and mother spoke English, I spoke what I did speak, accurately and without vulgarisms; and I therefore argue, that inasmuch as actual experiment has proved that a child, by the time he is ten years of age, may have acquired a good degree of practical skill in speaking three or four modern languages, by simply hearing them spoken at home, say, one by father, one by mother, one by nurse, one by tutor, and so on, — such being nature's method, there must be something unnatural in our mode of learning Latin and Greek, inasmuch as long years are spent before anything like mastery over them is achieved

sufficient to enable one to even write them correctly; and as to speaking them, I never knew anybody in this country who could do it, excepting that on Commencement Days, at our colleges, the presidents, on conferring the degrees upon graduating classes, give utterance to certain long used and therefore well-known Latin phrases, such as, (addressing the Overseers or Trustees), "*Presento vobis hosce juvenes quos scio idoneos esse ad recipiendum primum gradum in artibus. Placetne ut recipiant?*"

How is it on continental Europe? A gentleman from Edinburgh, who received his early education in Florence, went, recently, to Utrecht, in Holland, with letters of introduction to the medical professors of the College. Passing with one of them through the hospital, the professor, out of compliment to the visitor, dropped his own language, and for an hour and a half, made all his remarks upon the several cases in Latin; the students took their notes with ease, and the visitor readily followed him, although his Latin studies at Florence had been discontinued at a much earlier period, than when scholars leave schools in England to go to the University.

Is this, or can this be done by professors here, or even in England? or can it be brought about by our or their methods of teaching Latin?

I frankly declare that I cannot, with my own personal experience and observation, or from inquiries of very many educators and educated, be made to believe that the acquisition in memory of paradigms and rules, of observations and exceptions, without practical appliance of them, as the student progresses day by day, and page by page, to be either philosophical or sensible, or even justifiable, in view of the claims of learners.

You may give pupils a knowledge of forms and of rules, but you will give them neither understanding nor wisdom in the language. All these things must be made

intelligible by the intelligent and adroit teacher, whose power and control over the language, and whose methods therein with his pupils, reduce them readily to practice, and make them the manifest fruit of the genius of such language. "The ease and readiness of the accomplished and sagacious master are infectious," says the author of "*Ecce Homo*"; "and the pupil as he looks on (or listens, we may add), conceives a new hope, a new self-reliance, and seems already to touch the goal which before seemed removed to a hopeless distance. In this practical mode, the pupil gains a tutor, instead of a text-book,—a leader instead of a master, and when he learns *what* to do, he learns, at the same time, *how* to do it, and receives encouragement in attempting it." In the methods and work of such a master there are both conscience and high morality, and the sense of conscious duty apparent in him, awakens a sense of conscious duty in the pupil. Each of them is excited to enthusiasm, and each of them re-enforces the other in his work. In fact, good teaching is good morals; and it is well said by the same author, that there is no moral influence in the world, excepting that occasionally exerted by great men, comparable to that of a good teacher; and there is no position in which a man's merits, considered as moral levers, have so much purchase; and yet, the social position of the schoolmaster, though better here than in England, does not accord with the true dignity of his calling, and is, and has always been, practically held to be below those of the three so-called learned professions, while his emoluments are kept down to the lowest point, with the exception only of those who teach the ornamentals of music and dancing. If you desire to grow passably rich before you grow old, become a dancing-master, for the culture of the heels generally pays better than the culture of the head.

But I must return to the main track of my theme. The gerund-grinding method of which I have spoken was pursued, also, at Phillips Academy, at Andover, and at the Boston Latin School, both of which I subsequently attended, between 1811 and 1814, when I entered college. From my Latin grammar, I proceeded to some of the Colloquies of Corderius, a book now forgotten, though not by me. Thence I went to Virgil, Cicero, and Sallust; translating, parsing, and scanning, with unmitigated drill, but with no more knowledge imparted of Roman history, Roman life and manners, and the genius of the Latin language, than was imparted to me of the manners and customs and language of the Choctaws.

Mingled with those hardships was an occasional translating from English into Latin, from a book called "Clarke's Introduction to the making of Latin,"—and some pretty bad Latin I made out of it; and a sort of rather doubtful alleviation derived from committing to memory in the same dreadful manner, of that famous old book called the "Gloucester Greek Grammar." Nine dreary and weary months of tedious memorizing, did I spend at this fearful and exhausting job,—hating Greek, loathing the place of my constraint, and with no enrapturing love of those who taught it with a book in one hand and a cowhide in the other,—men, who, in the severity of their professional bearing, seemed to lose all the gentle amenities of their better natures; some of them like unto him described by Carlyle in "Sartor Resartus,"—"down-bent, broken-hearted, underfoot,—(and he might have added, underpaid,) martyrs, as others of that guild were wont to be,"—and tied down to an adamantean homogeneity of pedagogical canon, with little, if any, knowledge of boys' human nature, cramming into us countless irksome vocables and melancholy forms, littering the roots of our brains with etymological compost,

and calling it a fostering of the growth of mind. "They knew syntax enough, and of the human soul this much, — that it had a faculty called memory, which could be acted on through the muscular integument, by lively application of titillating birch-rods and sorrow-breeding cowhides."

It is said, and has been believed, that the appearance of comets presages the coming of direful calamities to the human race. Not delaying to argue the point, I will simply say, that the remarkable and huge comet of 1811\*, preceded my entrance upon the melancholy and grim campaign of the alpha, beta, gamma, delta of Greek, — of its verbs in  $\omega$ , and its verbs in  $\mu$ , its verbs anomalous, barytone, and contract, — its duals, middles, aorists, and paulo-post-futures, — with all the then to me attendant horrors of this inscrutable Greek Grammar; nine weary and dreary months, and then there was placed in my hands a book compiled by Prof. Dalzell, of Edinburgh, called the "*Collectanea Græca Minora*," on the 2d and 3d pages of which was a preface written in Latin, the reading and translation of which I venture to say, not one boy in ten thousand of those who used the book, ever attempted. I did not until the 18th day of the month of June, 1866 — more than half century after I first saw it, when I read the announcement, that by the help of the dictionary, and the notes at the end of said book, any scholar of ordinary diligence, and who has thoroughly learnt the inflexions of the Greek nouns, and the conjugations of the Greek verbs, — there being five of the former with a crowd of irregularities, and about a dozen of the latter with a crowd of irregularities, and an exuberant quantity of rules with a crowd of observations and exceptions, — any boy of ordinary diligence, unless he be, unhappily for

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\* I was then studying at Phillips Academy, Andover, under John Adams, A. M.

himself and the master, of a very stupid quality, will be able, quite readily, to get on with the contents of the book.

Now, like the said preface, all these notes, and all the meanings of the words in the dictionary, were in the Latin language; so that this unstupid learner, of ordinary diligence, had the pleasant task before him of first translating the Greek into Latin, and then translating this Latin into English. The Greek Lexicon then in general use, that of Schrevelius, also rendered all the Greek words into Latin, wherefrom it will be seen that the study of Latin must, of necessity, precede the study of Greek, although good arguments are not wanting for reversing this process.

It is a matter of justifiable pride to our country, that it had the honor of reckoning among the many learned men it has produced, the authors of the first issue, either in England or this country, of a Greek Lexicon with English renderings. I refer to the late Hon. John Pickering; and the late Dr. Daniel Oliver, both of Salem, the memory of each of whom should be held in grateful honor by all classical students. But think for a moment, of the double load, a lad fitting for college in those days, had to carry, and the double chance of error in working out his translation, while striving after the exact shade of the meaning of a word in English, itself first shaded off by touches of a Latin brush.

In England and Scotland it was, perhaps yet is, worse; for there the unhappy urchins had to commit to memory their Greek grammar all written in Latin. As, says the author of "Day-Dreams of a Schoolmaster," for five dreary years this process went on with me. Every day, I committed to memory some page or half-page of this sacred, but unintelligible book. I revised it and re-revised it again and again. To lisp its contents seemed as nat-

ural as respiration; (and he might have added as perspiration, — for it undoubtedly produced it,) — contents which no one of us seemed called upon to understand at the time, and to which, in their Latin forms, no one, to my knowledge, was ever afterwards referred.

And the grand result of all this expenditure of time and labor at the schools of England and Scotland, seems to culminate in enabling a very select few of the pupils to work up Latin or Greek poetry, to spread the ideas of English poets over Latin and Greek hexameters and pentameters or alcaics. It matters not whether the pupil's bent were language or science; prose or poetry, verses, more or fewer, of some sort, he must get up. It is the universal thing. Nothing short of it will satisfy the classical demand in that market. That is the desired haven towards which the educational bark of these schools, steers her constant way.

The writer just quoted, speaks of a description of sunset, a lucky hit, which he kept on hand as a staple article of Latin poetry. Using it as prelude to an ode on Lucretia, it gained him at school a prize of books. Using it a second time, as prelude to another ode, on the Moors in Spain, it gained at Cambridge (Eng.) a gold medal; and he declares that he could, with ease, work it up as prelude to an ode, say, on the "Exhibition of all Nations."

This, then, seems to be the great end and aim of classical education in England and Scotland, — to train up a very small proportion of scholars to such a knowledge of Latin and Greek as will enable them, with the help of the "Gradus ad Parnassum," to work out what, by a solemnly facetious custom, is called poetry, Latin or Greek. Not but what there may be among it, the fruit of some one of poetic temperament, some good poetry. Vinny Bourne, an usher of Westminster School, between 1730 and 1747, produced some,

scarcely inferior to any thing in Ovid or Tibullus. But was at the expense of almost all other knowledge; and Cowper, one of his pupils, says of him, that he was so indolent and good-natured, that he lost more than he gained by him, and such a sloven, that he seemed to trust to his genius as a cloak to everything that could disgust you in his person. But England is the unyielding home of intensest conservatism. She always cherishes the exceptional and the anomalous, and her great endowed schools are supremely exceptional and anomalous, as the educational world now stands. It is well known that a large number of the eminent men of the kingdom,—eminent in theoretic and practical science, in general literature, in politics and the arts,—are not graduates of her colleges. Of her public schools, the nurseries of her colleges, Howard Staunton says, in his admirable book thereon, that they furnish neither the best moral training, nor the best mental discipline, nor the most substantial mental enrichment; they do not form the most accomplished scholars, nor the most heroic, exalted and disinterested men; and that "the highest merit claimed for them by their warmest and most discerning friends, is, that they are the theatres of athletic manners, and the training places of a gallant and generous spirit for the English gentleman."

If this be true, it contributes to gentlemanliness, that the aristocratic element be most sedulously cultivated and tenderly cared for; and that flogging and fagging to an extent that outrages decency, morality, and all sense and feeling, should be sacredly kept alive; and although both are condemned by able thinkers and writers on educational matters, yet, says Staunton, "from dread that England should be ruined, were ancient traditions and customs permitted to perish, the administrators of her public schools as passionately fight for flogging, as if it

were a kind of sacrament to be added to the other seven." And fagging, that most savage and capricious style of boy-bullying on the one part, and of mingled terror and anguish on the other, abominable, execrable and monstrous in wrong as it is, is not yet wholly abandoned.

Now, it was from England that the method of teaching Latin and Greek came, which was in vogue in my boyish days. Looking back upon it, under present light, I consider my training and that of my comrades, as a continuous series of blunders; a good many of them on our part, and a good many more and greater, on the part of our teachers; though I ought to say, that they taught according to the system, or the no-system, of their day; though as to anything like a distinct system, or as to any distinct carrying out of a fixed purpose, founded on the philosophy of teaching, and tending to produce a definite mental status, and sure scholarly result, I cannot testify of its existence. But I can testify that I have very dim recollections of any attempts to awaken a love of learning, or to incite and increase such love, whenever, being innate in any boy, it happened to crop out. The highest motive, and most permanently held out, with its portentous instruments kept in full view, was to be the best scholar under the fear of punishment. So far as I remember, my ante-collegiate instructors, with but two exceptions, and I am not sure but that is one too many, were gentlemen of the whack-back school, who with the whip, "mend the gross mistakes of nature, and put new life into dull matter." One of them was a wholesale dealer in tortuous leather and torturing blows, whose image, whenever

"Fond memory brings the light  
Of those sad days before me"—

is that of a stalwart man of six feet in his stockings,—with the sweet poet of Mantua in his left hand, and a

twisted thong in the other, — or, as I might illustrate him macaronically, —

Leather-strap one hand holds, *Virgil tenet altera dulcem;*  
*Omnis et infelix errans* feels licks from his cowhide;

he striding across the floor of the Boston Latin School, say about Anno Domino 1812 (my brother, N. K. G. Oliver, H. C., 1809, being usher), to give some luckless blunderer, over back and shoulder-blade, sundry savage wales from fearful sweep of his tremendous right arm.\* I once narrowly escaped such fate myself, when, on the principle of the frequent similarity in sound between Latin and English words, and believing in "*similia similibus*," I gave "*Buffalo*," as the English of the Latin word "*Bufo*," when it simply means a squatty toad. Could any ordinary brain have perpetrated so ludicrous a blunder? and how the wrath of the master was changed into a roar of laughter, which even now rings in my ears, and which occupied him so long and titillated him so deliciously, that I, rushing on with the translation of the passage, to my unutterable joy, escaped the common penalty.

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\* ——— "*Memini quæ plagosum mihi parvo  
 Orbillum dictare,*" ——— *Horace.*

Recalling what, when but a little chap,  
 Dread — taught me, with a stinging rap.

So Domitius Marcus, whom Ovid mentions, says of this same Orbilius, who was a Teacher at Rome, in the time of Cicero, —

"*Si quos Orbilius ferulâ, scuticâque cecidit;*"

All whom Orbilius thrashed with *ferule* and with rod.

This was at the Old Latin School in School street, which stood where the "*Parker House*" now stands, feeding the body a good deal more thoroughly than the mind was once there fed. The name "*School Street*" is yet preserved on the principle of "*lucus a non lucendo*."

What I have given is a picture of school life in my boyhood. The method of work of both pupil and master was, in all schools, essentially the same. We had a lesson assigned us to be studied and learnt, with grammar and dictionary, as chart and compass, and often helmsmen too. Questions of the master, who heard all recitations in the general school-room, midst all its murmurings and noises, we had the privilege of asking, if we did not carry the thing to an unreasonable or vexatious extent of inquisitiveness. There was only one recitation each half-day, at which you were expected to present yourself, "knowing all about your lesson," as the phrase was. And "knowing *all* about" fifty to one hundred lines of Virgil, and two to three pages of Cicero and Sallust, or an equal quantity of Greek, was about an impossibility under the existing methods of study and teaching, and probably meant much less than the same words under the interpretation of modern teachers and methods. The phrase would, very likely, dwindle down into "very little about it"; for beyond the processes of translating and parsing, giving a rule in the latter process often only mechanically, and the scanning of the simpler lines of Virgil, — and that generally mechanically, and with the help of a musical ear, — almost nothing was done.

I have no recollection of receiving adequate, or even inadequate instruction, in ancient geography or in Roman or Grecian antiquities, until after my admission to college, and then it was very indifferent, uninteresting, and unprofitable in either of them.

Our questions about points difficult to us, were often repelled by the command of the master to go to grammar and dictionary, or by some more emphatic phrases, in which the words "idler," "blockhead," "dolt," or blunderhead," held prominent place, as though such words, so given, were animating encouragement, or

quickenings allurements to the unlucky scholar to press forward into the Elysian fields of classical learning, or to drink more and more deeply of the Pierian spring. A lad might be pardoned for an unwillingness to go forward, since he might ask if he got such gibes in his early and simpler Latin, what amount of scurrility might he not have to encounter in his later and tougher. And, as though if a lad were a "blockhead," and a "dolt," and a "stupid," it were his own fault that he was created with so small an amount of brain, and he was therefore blameworthy in not becoming, with proper speed, a classical Solomon. There are shades of mental endowment, as there are shades of complexion. It is no fault of mine that I was created a white man, nor justifiable pride of the king of Dahomey that he was created a black one. The choice was never presented. Sir Isaac Newton and Laplace had great cause of gratitude to God that He had endowed them with so vast mental capacity; but it is small fault of the poor imbecile half-wit, for whom our State philanthropy provides some means of improvement, that the same just and good Being has from him withheld his intellectual bounties. He doeth as seemeth good in his sight;—and doth not the Good Shepherd, who carries the feeble lambs in his bosom, and leaves the stout and able-bodied sheep to follow on in his own strength, teach thereby a lesson to those who are the intellectual shepherds of our lambs and our sheep?

There is no fault to be more carefully and resolutely avoided by teachers than the habit, too frequently indulged in, of satire, raillery and reproach, of vituperating and taunting a pupil because of lack of just that gift which Omnipotence alone can bestow, but yet may have seen fit to withhold. Is it not really saying to the potter, and in language of rebuke, why have you made this vessel thus? Is it not reproaching the Creator for what He has created?

Rebuke for idleness — nay, in extreme cases, strong remedies for persistence therein, may be justifiable, if milder means of cure fail. But no boy's, nor no man's dulness was ever sharpened by the grindstone of abusive words. And neither man nor boy was ever incited to more faithful work by a "fillip on his brain pan," or a philippic against his brain. Shakspeare well says:

" Let those that do teach young babes,  
Do it with gentle means and easy tasks."

Are there not babes in intellect, as well as in bodily size?

Taught and trained and disciplined, and educated, — if this word can with propriety be applied to such a method of dealing with a young intellect, — I reached at last the end of the business, the goal and aim of this driving, in being declared fit to be presented for college, and this was at the end of five years of such mental drudgery as I have described. I was offered by my brother, then a private teacher. The examination for admission in those days (1814), was not excessively rigid, and I passed in with a crowd of some ninety others. It is not part of this discursive address to speak of the methods of teaching in use then at College. In general, they did not materially differ from those of our ante-collegiate training, barring the flogging.

That they were susceptible of great improvement, they who look back upon them under the brighter light of our educational day, cannot fail to perceive; and we congratulate the learners of our own times, that their lines have fallen upon far more pleasant, as well as more profitable places, and that the pre-collegiate method of the old Latin schools, with all its elemental unintelligibility and its savage penalties, has joined the shades of departed systems, and been ferried over the educational Styx. May it never return to torment our classical younglings.

I really believe that such a system worked a serious in-

jury to the profession of teaching, inasmuch as it must have deterred men of feeling, and men of manly pride and self-respect, from entering upon a vocation attended by surroundings so revolting. And I believe, too, that the social position of teachers has been unfavorably affected by it, inasmuch as society can hardly be expected to look with very benignant eyes upon that profession, the normal concomitants of which appear to be force and flogging.

It may be, and probably is the fault, in part, of teachers themselves, that, in some parts of the world, they are esteemed to be social underlings. Their own profession tends materially to make them domineering and imperious, and therefore not congenial as companions. A mere routine schoolmaster is, sometimes, by its influence converted into a sort of Sir Peter Positive,—a Sir Ablative Absolute,—one who may be disposed to say,—“I am Sir Oracle, when I speak, let no dog bark.” The tendency of routine in anything, is to thwart progress, both physical and intellectual; and although it may be more easy and acceptable to travel over a road well beaten by repetitious treading, it is always done at the expense of real advance and positive improvement, and both advance and improvement are of priceless value in education.

In the professions of theology, medicine, and law, new points come up more frequently, probably, than in that of teaching; and while lawyers and physicians have greater intercourse with the world, and so get the rust polished off, clergymen and schoolmasters, by their more secluded lives and labors, become professionally and socially oxydized, and are apt to be too willing to shun the raspings, and lubricating and burnishing influence of friction with the world.

The schoolmaster is even less in the world than the clergyman, though both would be very largely benefited

by a generous gain of worldly knowledge. So, too, would the schoolmaster be benefited by a larger and more liberal study, stepping outside and beyond that which is merely pertinent to his daily work, and he must see, if he reason correctly, that a wide course of collateral study and research is necessary to enable him to illustrate and quicken his daily teachings. He must know that as neither minister, nor lawyer, nor doctor, can become too learned, or too apt in his vocation, so can not the schoolmaster; and that neither of them can command a social rank befitting the dignity of their several professions, if he pass along content with merely that modicum of knowledge which will enable him to move but mechanically through his appointed work. As Iago said over and over again to poor, simple, hapless Rodrigo, "put money in thy purse, put money in thy purse," so it may be said to simple teachers, and some such there are, "put riches, put riches into your intellectual purses, for riches, both worldly and intellectual, command respect. The cause of the indifferent teaching of the times of my boyhood was to be found largely in the indifferent quantity of knowledge possessed by the indifferent teachers of those days. A most marked improvement has been since made in every particular.

There is now not only more teaching done, and more real instruction given by each several teacher, but the average knowledge of the young is greater; and this is because we have teachers of greater intellectual capacity, of greater intellectual culture and refinement, wiser in their calling, more earnest because more interested themselves in their specialty, and vastly stronger and more influential in their social position. And I earnestly exhort you teachers to strengthen your position still more, by strengthening yourselves in your professional power and capability, and by rendering your vocation more and

more indispensable to the well-being, the true interest, the real happiness, and the substantial progress of society and the world.

A further extract from that most delightful book, "The Daydreams of a Schoolmaster," will be a better conclusion than any I can originate. "O, schoolmasters, remember evermore the exceeding dignity of your calling,—not the holiest of callings, but running near and parallel to the holiest. The lawyer's wits are sharpened, and his moral sense not seldom blunted, by a life-long familiarity with ignorance, chicanery, and crime. The physician, in the exercise of a more beneficent craft, is saddened continually by the spectacle of human weakness, and human pain. You have usually to deal with fresh and unpoluted natures. You are dressers in a moral and mental vineyard. You are under-shepherds of the Lord's lambs, and are to lead them into green pastures and by the side of refreshing streams."—Throw into all your work the poetry of a pure and holy motive.

Then, in the coming days, when you are fast asleep under the green grass, they will not speak lightly of you over their festal fruit and wines,—or in their chatty reminiscences of youth, mimicking your ways, your words, and your accent, and retailing dull, insipid, boy-pleasantries. Enlightened by the experience of parentage, they will see with a clearer remembrance, your firmness in dealing with their moral faults, and your patience in dealing with their intellectual weakness. And calling to mind the old school-room, they will say, "Ah, it was good for us to have been there. For, unknown to us, were made therein three tabernacles,—one for us, and one for our schoolmaster, and one for Him who is the friend of all children and the master of all schoolmasters."

# LECTURE,

BY

CHARLES C. PERKINS.

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## ON DRAWING AS A BRANCH OF GENERAL EDUCATION.

FITCHBURG, JULY 27, 1871.

THAT instruction in Drawing should be considered to be an important branch of general education, appears to me one of those truths which

"Shine by the side of every path we tread  
With such a lustre he who runs may read."

There were, however, formerly, many, and these "*non admodum indoctis*," who, as Cicero says about the Romans of his day in regard to philosophy, "did not exactly disapprove of drawing if it were taken up superficially, but who at the same time thought it not worthy of deep study and hard work." At the present time there are comparatively few who are of this opinion; but while this improved condition of the public mind alleviates anxiety as to the future, it rather increases the responsibility of those who are called upon to treat the subject; for it is precisely because the ears of men are opened to catch with favor what may be said, that words should be well considered, so that nothing may be advanced which will not at once commend itself to the intelligent. In the present paper, besides bringing forward such arguments as occurred to me in favor of giving increased facilities for education in drawing to all who desire it, I have made some remarks upon the best methods of instruction, both because the opportunity seemed favorable, and because such a course appeared pertinent to the matter.

As drawing is the basis of architecture and sculpture, and holds the first rank even in painting; these arts are in English collectively called the Arts of Design, and in French, even more significantly named "*Les Arts du Dessein*." This acknowledgment of the superior importance of drawing in the arts is just, both because it is essential to them all, while color is so but to one, and because it is the language of form. Now, form is superior to color, because it is absolute, while color is relative; it endures while color fades; there are no two forms exactly alike in the world, while there are many objects which are identical in color. Every form has a meaning "*per se*," so that the slightest outline traced by a master hand speaks the thought which dictated it with unmistakable clearness to people of every nation and of every clime; while the finest color ever mixed on the palette of a Titian, unless circumscribed by lines, can convey no definite idea to the mind.

Drawing is the one language which mankind has retained in common.

The men of old still speak to us by its aid as plainly as they spoke to each other, and while we puzzle over hieroglyphics and cuneiform inscription, and are baulked in our efforts to interpret the Etruscan language, we understand their wall paintings and sculptures without effort, and without possibility of mistaking their meaning. Even music is a less universal language than drawing, for while it may be questioned whether we should understand, or be moved by the strains which soothed or stirred the Greek, it cannot be disputed that the music in which many Eastern nations take pleasure, is but a grief and confusion to ears trained to appreciate sound as divided after the European system.

As compared with any non-ideographic mode of expression, drawing is incomparably concise and explicit.

Pages of written character, and long oral explanations, will fail to convey as clear an idea of a triangle as can be given with three strokes of a pencil; and the sketch of any object, made by a tolerable draughtsman, will give a more distinct idea of it to the mind than the longest and most labored explanation. Find a man, for example, who has never seen a horse, and after reading to him the vivid descriptions of Plutarch and Xenophon, show him the frieze of the Parthenon, or the colossal horses of the Monte Cavallo at Rome, and then ask him which is the clearest, — the language of art, or the language in which books are written? There can be little doubt what his answer will be. The witty remark of Talleyrand, that language is intended for the concealment of thought, could never have been made about the language of the pencil, which is not only the most universally understood, and the most clear of all languages, but also the most natural mode of expressing ideas. To paraphrase the words of Varro, we may say, "*Divina natura dedit lineas, ars humana construxit linguas.*" The Egyptians employed hieroglyphics in a literal sense, long before the alphabet was conceived; nor was it till a later period in their history that they gave them a symbolic, or phonetic value, by making the bird express the idea of flight, or stand for the first letter in a royal name. I cannot deny, however, that despite the clear significance of drawing, it would be somewhat troublesome to substitute the pencil for the pen in daily life; but nevertheless, Goethe spoke truth, when he said that "we write too much and do not draw enough," meaning that we comparatively neglect one of the most useful and delightful of arts. In pointing out why it is so, we shall find an answer to the question, as to the object of educating the eyes and hands of the million, and shall perceive that in one way or another, men of all classes and conditions have something to gain

by learning how to see objects correctly, and how to delineate them accurately. Drawing is a practically useful power, because it teaches men to observe and to express; for it quickens the perceptive faculties, increases the power of the eye, gives cunning to the hand, and makes it the willing servant of the intellect. It may be regarded either as an accomplishment, or as a means of livelihood; either as a means of raising the standard of taste in a community, or of giving skill and knowledge to those of its members whose office it is to minister to taste and refinement by the creation of beautiful forms, whether though fine or industrial art.

It may also be considered in its joint action upon the public and upon those who are to minister to the public needs. It is by this joint action that it raises all men to a higher level, and maintains the necessary equilibrium in culture between those who buy and those who sell. The public must be capable of appreciating good work, for the supply will soon cease if there be no demand for it. Appreciation is to the spirit what air is to the lungs of the artist and the skilled artisan. If he does not meet with it he soon loses all stimulus to action, insensibly lowers his standard, and sinks gradually to the common level. The great desideratum then, is to educate the public to distinguish between pure form and corrupt form; and this can only be done by familiarizing it with good models collected in museums and art schools, and by refining the perceptive faculties through instruction. Education in beauty is desirable for all, if beauty is a good in itself; and to be convinced that it is so, we have but to look around us and observe how all things possessing

"Earth, sea, air,  
Reflect His attributes who placed them there."

From the star to the star-fish, from the mountain to

the mole-hill, from the giant oak to the mullien, from man to the worm, we find nothing created without some special beauty which adorns but never conflicts with its special utility. The lesson to be learnt from the great book of nature is, that our works, in humble emulation of those of the Creator, should be beautiful as well as useful, and that while we labor to supply our material wants we should not neglect those of the spirit, and rest contented with ugliness. All may acquire the higher sense in some degree. To those who are gifted by nature it comes more easily, for a fertile soil needs little toil to make it produce abundantly; but even the desert may be made to blossom like the rose if sufficient pains be bestowed upon it. As for drawing, it is as easily taught as reading or writing, and a peculiar genius for the one is no more needed than for the other. Only lately I heard a teacher of wide experience remark that he had never found more than one or two instances where it was impossible, and these arose from physical defects. I do not mean to say that everybody can be made a perfect draughtsman, but that all can be taught to draw a given object in correct proportion, and most people a great deal more; how much more depends in a greater measure upon the teacher than upon the pupil. The system of teaching pursued, the judicious selection of models, and the proper explanation of them,—these are matters of the greatest importance, all of which lie in the teacher's hands.

A poor teacher using mediocre models, necessarily produces mediocre pupils, and when once bad habits have been contracted, it is almost impossible to eradicate them. Let us consider a moment what sort of teacher is needed in an art-training school which is intended to turn out skilled artisans, and thus have a most important influence upon commerce and manufactures. The pupils

are men and women who have had a hard day's work, and who voluntarily undertake this new labor because they feel that what they desire to learn is an essential in that they are to become something more than simple mechanics. They want to be taught speedily and easily, for their time is limited, and their minds and bodies fatigued. They need to have such models set before them as are not overcharged with complicated lines or puzzling shadows, and are progressive in respect to difficulties to be overcome.

To produce the desired result, the teachers' method should be vigorous and rapid; it should be calculated to arouse curiosity and awaken interest. He should be ever ready to explain the model; as for instance, if it be a flat copy of a head he should point out what its position is; why this part is in shadow, and that in light; and then show them in a living model how the light falls upon parts, according as they are in high or low relief; of rough or smooth texture; and why shadow falls according to the angle of light. He should teach them how to seize the "ensemble" of any natural object, by broadly rendering the masses of light and shade.

The inevitable tendency of a beginner being to lose himself in non-essential details, he can never perceive this by himself, wherefore the teacher's best service is to spare him fruitless labor which will speedily exhaust the sturdiest patience.

Those who are conversant with the English and French systems employed in art schools, generally agree that the French is more speedy in its results and more interesting to the pupil. The English student aims at accuracy of outline; "he is required," says an eminent art master,\* "to begin his efforts to represent form as it is never seen by the eye, conventional, ex-

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\* Mr. Walter Smith, State Director of Art Education.

pressionless, and requiring precision at a time when it is vain to expect it. The wiry line does not exist in nature." Outlines are fugitive; they melt into the air without sharpness and the attempt to fix them in a sharply-defined contour must result in more or less of incorrectness."

Outline drawing is indeed of the greatest importance, and cannot be too much insisted on in advanced stages; but it is important that the beginner should not be wearied by being kept too long at work over mere geometric front elevations of forms without shadow and without color, as is often the case in English schools. He should first be taught proportion, and exercised upon elementary forms. His first attempts at shading should be of a sketchy character; emphasis should be given by varying the thickness of lines; and by oppositions of light and shade marked in broad and not too labored masses. Now it is far easier for the pupil to effect this with chalk and charcoal than with any hard point, and these are the materials which are used in French schools. The aim in France is "to get the greatest amount of the common element of art into artisans during the short time they are under instruction, and not to turn out professional artists."

Drawing is the alpha and the omega in French schools. "The same principles of absolute imitation in masses and contrasts of light and shade of forms presented to the eye is kept in view, and the same medium, chalk or charcoal, is employed by beginners and advanced pupils."

The instrument put into the hands of a beginner has a very important influence upon his future tendencies,—if it be sharp and hard it leads to a taste for correctness and hardness of line; if it be soft and easily handled it inspires a taste for effect and harmony. It would be

interesting to illustrate this remark by a careful survey of schools from antiquity to the present day. Here, I can only do so very superficially; but even this may be enough to show its truth. We know very little about the methods of teaching followed in ancient times, but this little seems to show that there was formerly a much closer connection between drawing and the use of color than exists at the present day.

The young Greek art student drew upon a block of box-wood with a material whose marks could be easily effaced with a sponge. It would appear, also, that the brush was much more in favor than the hard point. The outlines of figures upon painted vases were sometimes, it is true, scratched upon the clay with a pointed instrument, but generally they were traced with a brush of color very dextrously handled. Apelles and Protogenes in their famous contest of skill at Rhodes, made use of the same subtle and flexible implement which, though the most difficult of all to handle, surpasses all others in delicacy.

In the great Italian schools, we find the choice of instruments dictated by the predilection of each for form or color. Thus in the Florentine, studies were generally made with the pen or the silver point; while in the Venetian, soft chalks and washes were generally preferred. If Titian used the pen it had a broad nib, which produced thickish outlines and broad lined hatching. Raphael, on the contrary, made finer strokes with a harder medium, and when he wished to emphasize, did so by a multiplicity of closely contiguous lines and by varieties of thickness. It does not, however, appear that the hard point makes the better draughtsman in all cases, for we find that France, where charcoal is put into the hands of students, produces better draughtsmen than England, where a natural love of color ought logically to have led

to the use of the softer instrument. The advantage of charcoal lies perhaps in its being so easily effaced. No scholar is afraid of making mistakes, if he knows that he can efface them with a sweep of the handkerchief; he therefore proceeds boldly, acquires confidence in himself and a freedom of hand which he will carry with him when he takes a pen or a hard pencil in hand.

I said that a knowledge of drawing is a useful acquisition to all men, and that it may be regarded either as an accomplishment or as a means of livelihood. To prove this, I propose to speak of the traveller, to whom it is generally useful, and of the artisan to whom it is specially important. I need not speak of the artist, whose case is self-demonstrable.

Drawing is the essential element of his profession, for without a knowledge of it there can be no such thing as an architect, sculptor, or painter. No brilliancy of color can atone for feebleness of drawing in a picture, nor can the utmost technical skill make up for defective proportions in a statue, any more than splendor of imagery, or richness of fancy can condone faults against grammar in a poem. Wherefore, a man can no more be an artist without the knowledge of the one, than he can be a poet without the knowledge of the other. Men can, however, be travellers, or artisans, without knowing how to draw, though in both it is an immeasurable advantage. The traveller who can use his pencil, happily fills up many hours which else might hang heavy on his hands, and besides the mere pleasure which he derives from it at the moment, carries with him an invaluable aid to memory. If travelling, by which I do not mean the mere process of getting over a given portion of the earth's surface in a given space of time, is profitable to any one, it is so because it widens the mind by teaching us to know the manners, customs, and arts of many

nations, and the countries which they inhabit. Whatever, then, helps to fix these things in our minds, and to recall them to us in after life, is eminently useful to us.

And this is what drawing does. "Thrice is he armed" who can use the pencil to illustrate, as well as the pen and tongue to describe, whatever of interest he has seen in foreign lands; but of the three instruments, the pencil is the most effective; for though he may talk and read to his friends for hours on his return home, it is to his sketch book that he will turn if he would make them realize the aspect of some striking scene in nature, or bring it vividly back to his own mind. As he turns over its pages many a forgotten incident comes back to him. This sketch of an old castle recalls to him its history and the legends connected with it, and the black lines which mark the little pathway from its crumbling portals to the river, reminds him how he descended by it and took boat in the gathering twilight, listened as he crossed the stream to the solemn chants of the monks in the old convent on the opposite bank. Is our traveller an archæologist? then he will have pages filled with invaluable records of objects of interest seen in foreign museums; does he love painting? then he will have made pencilled notes of many a master-piece; or, is his taste architectural, have sketched many a portal, tower, or shrine. In short, whatever his tastes may be, he will have provided material for their renewed gratification, and will not have travelled in vain. If a knowledge of drawing be essential to the artist, and thus valuable to the traveller, what is it to the artisan? The answer to this question is contained in the proper definition of a skilled artisan; a skilled artisan is a mechanic who knows how to draw, and who, thanks to such knowledge, has quadrupled the value of his labor to himself and to the State.

In ancient times, in the middle ages, and the renaissance period, the relations between free and industrial art were of the closest character. Then the artist did not disdain to be an artisan, nor the mechanic neglect to make himself something of an artist. Almost all the great Florentine artists of the fifteenth and sixteenth centuries were apprenticed to the goldsmith's trade in their youth.

Orgagna, Ghiberti, Pollajuolo, Francia, and many others of equal renown, owed to this the exquisite skill and delicacy of hand for which they were distinguished. Ghiberti having modelled the gates of Paradise made a cope button for the pope; Raphael, after painting the Spanze of the Vatican, designed the cartoons for the tapestries which were to be woven in the looms of Arras; Cellini modelled statues for Duke Cosmo de' Medici, and chiselled cups and salt-cellars for King Francis I. These great artists were not only skilled in fine arts, but they understood the technical processes of all the industrial arts, and thus designed objects with due regard to the material in which they were to be made. These designs were in many cases carried out by workmen scarcely less artists than themselves; men whose taste was elevated by constant familiarity with good design; men who understood the principles of beauty embodied in these designs, and who therefore worked them out with a pleasure of which their modern representatives have no idea. When their work was done it met with such ready appreciation that they were stimulated to renewed efforts.

The Athenians in the days of Phidias, and the Florentines in the days of the Medici, recognized and appreciated good work, and their good opinion was sought by the greatest artists. Phidias, we are told, concealed himself behind a door of the temple when he had finished

his colossal Jupiter, that he might profit by the criticisms of the crowd. The Greeks, as Cicero tells us in one of his Verrine orations, dearly loved and valued the fine works of art with which their temples and towns were decorated, and this not only on account of religious feeling. Believe me, he says, that nothing has so deeply afflicted them as the system of spoliation of works of art carried on by our generals; nor has any city in all Asia Minor or Greece, ever voluntarily sold a picture or a statue, or any such like ornament. Even the Romans, whose indifference to art the great orator here contrasts with the Greek enthusiasm could not bear to love the sight of a fine work to which they had become accustomed. Thus, when Tiberius removed the statue of the Strigilarius by Lysippus, from the public circus to his own palace, they raised such a tumult that he was forced to restore it to the public gaze. The separation between art and industry in modern times has greatly lowered the general standard. Now, when each pursues a separate path, both the public and the workman are indifferent to the artistic beauty of cups and pitchers, and chairs and tables, and regard them solely as objects of use. All that the public desire, is, that they should be strong and serviceable, and it is to this object that the workman adapts himself. The modern point of view which he takes is totally opposed to that taken by his ancient prototype. Imagine the confusion of a modern potter suddenly transported to Athens in the olden time, and required to treat his ware from the stand-point of the "Hand King's" of the Kerameikos; or the consternation of an Athenian artisan of the time of Phidias, at finding himself set down in a modern city, where, instead of the fictile vases whose form and decoration made the cheap Terra Cotta out of which they were fashioned more precious than gold or rubies, he would see vulgar shapes

and ugly forms perpetuated in silver! The wish of Pindar, "Oh, may the gods give me the love of beautiful things," had been granted to such as he, and ugliness had become as intolerable to him as vice to Socrates or Plato.

In order to bring back in some degree the old state of things, the men who are interested in art education at the present time, seek to raise industry from the low trade level to which it fell, when the manufacturer arose and separated it from its legitimate companion. France, where the separation has never been so absolute as in other countries, has always held a superior position in regard to matters of taste. The establishment of those great national workshops, the manufactories of porcelain at Sevres, and of Gobelin tapestry and carpets at Paris, fostered the taste of designers, whose "status" was raised because artists were employed there, and private manufacturers sought their aid. The royal manufactories of porcelain, established in Germany at Meissen, and elsewhere, and the manufactory for the weaving of tapestry at Arras, in Flanders, acted in the same way; but in England, with the exception of the attempt made by Charles I. to introduce tapestry weaving at Mortlake, the government did not endeavor to cultivate public taste, by itself becoming a manufacturer, until the days of Prince Albert. The wide separation of the great centres of industry in England from the capital, where artists naturally congregate, hindered the union of art and industry which was favored by the centralization of artistic life at Paris. The central action of the Kensington Museum, through the Art Schools connected with it all over the United Kingdom, has given a wonderful impulse in the right direction; and individual effort, such as that made by Morris and his associates, to shape public taste, by offering good designs for household articles,

tends to the renewal of that old bond between the studio and the manufactory, in which lies our hope for the future.

Let us now briefly consider what the mechanic wants to learn in the art school. As the great object is to enable him to master form in his own mind, so that he may be able to conceive whatever shape he may have to make or work with, and to understand working plans, he should not only be taught to draw with accuracy any object which is set before him, but also to reproduce it when it has been removed from his sight. Thus his memory will be strengthened, and his mind filled with valuable ideas. He must be taught the use of instruments; learn something of perspective, and something of geometry; for, as some one has said, the old Greek inscription, "None but the skilled in geometry can enter here," ought to be written over the door of every workshop.

To artisans of one class, machine drawing is most important; for without it a man cannot understand the whole of any work of which a portion has been assigned to him, and this he ought to do, because his work is destined to fit the work of his fellows. Artisans of another class, — decorators, for example, — must master the principles of ornament, be able to draw it correctly, have their taste elevated by a comparison of styles, and even learn how to draw the human figure, which is often needed in decorative work to save it from monotony and insipidity.

If it be asked why a skilled artisan is better than a common mechanic, I answer, because labor controlled by scientific knowledge, is incomparably more valuable, both nationally and individually, than mere labor unaffected by these influences. The close connection between general excellence of workmanship in the me-

chanical trades and the scientific education of artisans, makes it most desirable that it should be given to them, both for their own sakes and for the sake of the community of which they form a part. The eagerness which our mechanics have shown to enter the free drawing classes opened at the expense of the State during the past year, clearly proves that the desire for instruction is not wanting on their part. One thousand applicants presented themselves for admission within a week after the classes were announced at Boston; and at Worcester, as Prof. Thompson has told us in a valuable paper prepared for the Social Science Association, thirty applicants only were expected, and two hundred presented themselves. These men came because they were convinced that what they would learn would increase the value of their labor; or, in other words, that acquired skill would assure them higher wages in the workshop. If they knew how much is done for their brethren in England and France, they would feel that they have hitherto been sadly neglected. Read the remarks of the deputation of artisans which was sent over to France by the Society of Arts, to report upon the great exhibition, and you will see that with all that has been and is being done for them in England, they found reason to draw a sharp contrast between their own position at home and that of French artisans in respect to advantages for instruction. If they complained, what would a similar body of American artisans have done, who are as much more poorly cared for than the English as the English are than the French?

One of the most striking characteristics of the French designer is, his constant endeavor to profit by the past. He knows that novelty is seldom anything but re-combination, and he therefore seeks to familiarize himself with works of all periods and styles. He is lost when

he gets out of their influence, and every day feels his inventive powers becoming weaker. Ask him why our artisans are unartistic and unimaginative, and he will tell you that it is because they have no such stimulus to excite their artistic faculties, or warm their imaginations, as he has in his museums and art schools, and in the pervading atmosphere of taste which surrounds him. So far from wondering at their condition, he will ask you if birds can fly where there is no air, or fishes swim without water.

Our artisans want something to see, something to study, and until we give it to them we cannot expect them to make progress. When we have done so and have taught them how to draw, we may hope to bring about that fruitful union of art and industry which once produced such wonderful results. Then the artist was both poet and artisan, and the artisan both artist and mechanic, and thus it should ever be. Though the Alp has its sublime solitudes, its base which is firmly planted on the earth is surrounded by green valleys whose waving fields of corn give sustenance to thousands. These are nourished by the clouds which gather about the mountain top and fall upon them in showers, and descend upon them in waterfalls with fertilizing power. So art, whose realm is the cloud-land of poetry, should pour down a beneficent and elevating influence upon industry.

## ON THE GROWTH OF AMERICAN COLLEGES AND THEIR PRESENT TENDENCY TO THE STUDY OF SCIENCE.

A PAPER BY DANIEL C. GILMAN, ONE OF THE PROFESSORS IN THE SHEFFIELD SCIENTIFIC SCHOOL  
OF YALE COLLEGE.

(The first part of this address was given at the opening of Sibley Hall, in Cornell University, June 21, 1871.)

SUPERIOR education in this land has already passed through two distinct phases. The first was the establishment of simple colleges, based upon the plan of the English college (with which so many of the Puritan ministers of New England were personally familiar), a place of prolonged residence under tutorial instruction and rigid supervision, with one curriculum for all sorts of students, in which classical studies were predominant, with a liberal recognition of the value of scientific, mathematical and especially of metaphysical and logical learning. From Harvard, the mother of us all, and from Yale, her eldest and most prolific daughter, sweet influences have gone forth to control the destinies of our land, shaping our political institutions, defining our laws, increasing our liberty, purifying our Christian faith, diffusing instruction among the people, giving dignity to our literature, promoting science, and tending to exalt the culture of the mind and heart above the possession of that material prosperity which the exuberance of a virgin soil and the untold wealth of mines bestowed upon us.

We can never too highly praise the large-mindedness,

the far-sightedness, the open-heartedness, of the early emigrants from England who planted here on their arrival the seeds of liberal culture, the acorns from an English oak, which they had gathered in Oxford and Cambridge. Until the beginning of the present century, these simple colleges were the only seats of higher learning; they are still invaluable and indispensable; they have spread from New England to the Interior, the Pacific and the Gulf; they have assumed a distinctive American character; they are still strong and growing; wherever established they are centres of light and power, promoting good, restraining evil, progressive in the best sense, conservative in the best sense, educating as of old for church and state, the most promising of our youth. Long may they live and flourish.

It will be a curious inquiry, for some philosophical writer on the intellectual progress of this country, to ascertain what were the themes, the text-books, the methods of instruction and tuition which prevailed in the American colleges prior to the Revolution; what sort of instruction at Cambridge filled Samuel and John Adams with their notions of civil liberty; what sort of culture at New Haven brought Jonathan Edwards to his lofty rank among the theologians of this country and of Scotland; what discipline at Princeton fitted James Madison to exert such an influence upon the formation of the Constitution; and what academic drill at Columbia College, in New York, made Alexander Hamilton the founder of our national credit and our financial system.

When that inquiry is made, there is a curious waif among the archives in the college library at New Haven, which will show on what spare diet strong men have been fed, and which will exhibit more forcibly than volumes of speculation the poverty of the intellectual forces once at work in comparison with those now ope-

rating. I refer to a worn and almost illegible manuscript which contains the notes of lectures which were given in Harvard College, two hundred years ago, to the class of 1668, just thirty years after the foundation of the college. The student whose jottings are thus handed down was Abraham Pierson, who afterwards became the first president of Yale College, and thus the transplanter of Harvard lore to the favoring soil of a sister colony. There is a motto twice written in the volume, ending with words which it is amusing to see in that connection: "*Hoc tantum scio nihil scire.*"

But we must not linger at the dawn. The inquiry, however inviting, cannot now be pursued. The simple "college," good as it was, proved at length insufficient for the requirements of the country. It became essential to supplement it with schools of "professional" training, which grew up sometimes as independent plants, and sometimes as grafts upon the college stock. Thus it came to pass that on the lofty hill in the inland town of Litchfield, Judge Tapping Reeve, in 1784, established, unaided, a school of law to which young men were drawn from every portion of the land; so the need of mathematical training and scientific expertness, especially with reference to the national defence, led the government of the United States to found, in 1802, the Academy at West Point, with the intent of educating officers, with the result of educating also our earliest civil engineers and many of our leaders in mathematical science; so again, the needs of the churches of New England led, in 1807, to the foundation of a school of theology in Andover.

Such examples were quickly followed. The new foundations when united with the older colleges were distinct in funds and in teachers, and were usually considered as the "outside" departments. Often they were placed under separate trustees. Thus the college of Physicians and

Surgeons and the General Seminary of the Protestant Episcopal Church in New York were not attached to Columbia College; the Presbyterians, planting a theological school under the shadow of Nassau Hall, placed it under a different board of managers; the Congregationalists in Maine placed their school of Divinity in Bangor, while the college was in Brunswick; and the Dutch in New Brunswick made their seminary a distinct corporation from their Rutgers College. At Harvard and Yale, the faculties of law, medicine and theology were successively added to the faculty of arts, under one board of trustees, but "the college," the original nucleus of the institution, has never proposed, and, so far as I know, has never been asked, to divide with the new foundations the meagre estates by which its own life is arduously maintained.

The consequence of this movement has been, that within the first half of the present century, large numbers of schools for instruction in law, medicine and theology have been established, many of them well manned and endowed, and highly serviceable in the training for the three ancient professions. Like their predecessors, the colleges, these higher institutions have a decidedly American character.

We are now in the opening of the third period in which there is a strong tendency towards the establishment and development of universities, as superior to and inclusive of colleges, and also as more comprehensive than the schools of professional discipline. We are not agreed as to exactly what we want, and we are more at a loss as to how to get it. But far and near through the country we feel the need of more men of education and of men of more education; both in quantity and in quality we are conscious of our deficiencies. Our writers perceive the want and continually discuss it; our public men recog-

nize it, for they favor, especially in the Western States, legislation and appropriations which tend to improvement; our men of wealth acknowledge it, for they come forward with munificent contributions to provide better things for the future than we have inherited from the past.

Some would prefer to change our colleges into universities, either omitting altogether the traditional four years' discipline, or transferring it to the high schools and academies; others would cling to the traditional college, and make its four years' course, improved in details but essentially unchanged, the basis of all higher professional and university culture; others, again, would duplicate the traditional classical course, in which science is subordinate, with a parallel and coördinate course in which science shall predominate and language be subordinate; and others again, retaining the traditional four years' course as the basis of yet higher training, would allow of great freedom of choice in respect to the studies which make up the curriculum. Here are at least four tendencies.

There are many other unsettled questions, especially in respect to the constitution of a university; whether a State organization, as in Michigan and California, is the more desirable form; or a combination of the State control and the private or close corporation, as in Ithaca and New Haven; or a totally private corporation, like the present organization in Cambridge. Unfortunately, these differences are not all. There are many who would carry into the university the control of one ecclesiastical body and one phase of religious faith, so that each denomination shall not only have its religious weekly and its ponderous quarterly, but its school, its college, or its university, fixing firmer and firmer the bounds which already too much divide the disciples of One Lord and

the advocates of One Faith. Moreover, there are a few whose confidence in the national government is so strong that in their opinion the true seat of the American University is the city of Washington, and its proper endowment the general treasury.

But whatever difference of opinion there may be on these and other points, the thinking Americans are eager for university foundations; and by this they mean endowments for the promotion of all the liberal arts and sciences and for the preparation of young men to enter upon all the higher intellectual occupations of society. It would seem as if they were ready to adopt in our time, and to adapt to our wants, those ancient complaints: "First, therefore, among so many noble foundations of colleges in Europe, I find it strange that they are all dedicated to professors, and none left free to the study of the arts and sciences at large. . . . If any man thinks that philosophy and universality are idle and unprofitable studies, he does not consider that all arts and professions are from thence supplied. . . . Neither is it to be forgotten that this dedication of colleges and societies to the use only of professorial learning has been not only inimical to the growth of the sciences, but has also been prejudicial to States government." \*

Thus has grown our desire for superior education, first shown in the college with its tutorial learning, next manifest in the professional lectures, and now exhibited in our crescent universities, with their complexity of departments and schools, libraries, cabinets, observatories and museums.

In proceeding to discuss the present tendencies of American universities, may I be allowed a word of personal explanation? I am a hearty believer in the value of language, literature and history as the means of intel-

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\* Bacon's *Advancement of Learning*, viii., 399.

lectual culture, and as a basis for other higher studies. Our country needs more and not less such training. Moreover, a prescribed curriculum, proceeding by definite and fore-appointed steps, and allowing but slight deviations, is for many young men, of indefinite, or vague or undeveloped plans, the most successful kind of training. The time has not yet come, nor does it seem to be coming, when the traditional college will be done away with in this land. Modified, improved, renewed it will be; but there are no prospects of its abolition.

But while holding these views, I would favor the expansion of the university, so that every branch of learning may receive its just proportional recognition; and I should favor the establishment of such different preparatory courses, and such schemes of advanced study as will suit different minds, different purposes, different purses. The words of an illustrious Scotchman, Sir William Hamilton, seem to me full of wisdom. "Nothing," he says, "has more contributed in this country to disparage the cause of classical education than the rendering it the education of all." \*

1. No one can prophesy what our universities will be. But one thing seems sure. They are likely to be peculiarly and thoroughly "American" universities, as our colleges and professional schools are likewise American. An English historian and statesman remarked to an American gentleman, early in our recent war, that no one could predict the course of events among us, for the circumstances of the New World are so different from the Old, that precedents fail here which are trustworthy there. So in education, our political wants, our undeveloped country, our religious habits, our systems of common schools will all tell on the future university; and while we may learn much from Oxford and Cambridge,

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\* Discussions, page 343.

from the canny Scotch and the erudite German, our modes of promoting the highest education will differ as our social ways and our political theories.

2. It seems probable, also, that in all the newer States of the West, the universities will be based upon the grants of public lands and upon other State appropriations, and that they will come chiefly under the management of the State, acting through its legislature, either directly and frequently or indirectly and spasmodically; while at the East, with the exception of the national scientific fund, and an occasional gift, we shall continue to be dependent as we have been upon the gifts and legacies of men of wealth, and happy may we be that there are so many able and eager to bestow their aid.

3. Again, let us hope that the American universities will cherish all branches of learning, giving precedence only to those which sound judgment indicates as most useful in our day. To do all that we would, may take more than we have. But let our hopes, our plans, our faith, be as wide as the realms of human knowledge, as varied as the aptitudes of men. Let those of us especially who strive at Harvard and Yale, at Ithaca and Oakland, to extend the range of university studies and to introduce the manifold chairs required by modern science, be on our guard that we do not disparage and undervalue that which we have inherited from the past. Let neither novelty nor age prejudice us against that which will serve mankind. Let not our love of science diminish our love of letters.

4. At the same time, the chairs of science must be more numerous in our universities than they have been elsewhere and hitherto. It is, indeed, the tendency at home and abroad to increase the opportunities of scientific research. It seems as if the human race, after years of groping, had at length, in these modern days, arrived at

the right method of investigating the laws of nature. Abandoning authority as decisive respecting the material world, and resorting to observation, experiment, and mathematical investigation, the philosophers of modern times have been interpreting the laws of the Creator by methods which will endure, and thus they have come upon results of the highest value to mankind. It is true that, compared with what is knowable on our planet, the known is but little; it is true that many of the most interesting problems to which the mind can turn still refuse to be solved; and it is likewise true that the progress of the last century has not only led to positive results, but has led to the adoption of methods and of instruments from which still greater results are likely to come. Hence come new branches of science, more trustworthy textbooks, more extensive and systematic museums and collections, more accomplished teachers, more callings which require a knowledge of science, more obvious advantages to society from the promotion of learning, more generous gifts for the purposes of science, a more complete university.

5. It is safe to say that the battle which has been waged between the devotees of science and the proficient in letters are over. That question is settled! Science has won its spurs and achieved its knightly rank. Yet classical learning has not suffered by this progress of the times. On the contrary, the application of modern scientific methods to the study of language has built up the new science of comparative philology, which is giving fresh vigor to linguistic research and leading to most instructive lessons in respect to the history of mankind, the development of races and the progress of civilization. Though the battle between science and letters is over, there will still be skirmishing; and when night-fall comes upon the battle-field, we must still expect to hear aloft

among the clouds, as did the barbarians before the walls of Rome, the clangor of arms which are wielded by the ghosts of the departed.

In the history of education, I know of no coincidence more remarkable than the opposition which has been twice exhibited against what has been called "the New Education." Nowadays, this term is applied to the instruction of scientific schools and colleges. But, let me remind you, three hundred years ago "the New Education" meant instruction in Greek. Some of us may find comfort in remembering that what is said against science was once said against Greek. The world was then under the tuition of the scholastic lecturers, who, indeed, pretended to teach Aristotle, but who really taught the heaps of rubbish and straw under which the old philosophy was buried. When the overthrow of Constantinople drove the learned Greeks to the cities and schools of the West, the scholastics and theologians, comfortably seated in the pulpits and universities, bitterly denounced the attention which was paid to Greek. Their utterances were vehement and merciless. The Christian faith, they claimed, was in peril; the classics would drive out theology; tried and tested modes of education were to be superseded by empirical and worthless schemes; the Humanities would supplant Divinity; and the hopes of society would be endangered by giving up the four years' training in the arts.

It is, moreover, curious to notice that the changes in the scheme of study came from outside pressure and not from inside preference. "The awakened enthusiasm for classical studies," says Hamilton, "did not in Germany originate in the universities; it was only after a strenuous opposition from these bodies that ancient literature at last conquered its recognition as an element of academical instruction. The new philosophy," he continues,

"was thus, as the Leipsic masters expressed it, 'a fifth wheel in the wagon'; it was abominated as a novelty that threw the ancient learning into discredit, diverted the studious from the university, emptied the schools of the magistri, and the bursae or colleges over which they presided, and rendered contemptible the once honored distinction of a degree." "Greek in particular, and polite letters in general, were branded as heretical, and while the academical youth hailed the first lecturers on ancient literature in the universities as messengers from heaven, the academical veterans persecuted these intruders as preachers of perversion, and winnowers of the devil's chaff." Of many illustrations let a single one suffice. Early in the sixteenth century, Erasmus, who came to Cambridge to be a teacher there, tells us in one of his letters, with some pride, that now, both in Oxford and Cambridge, the Greek tongue is taught; in Cambridge "quietly"; but not so in Oxford, for there, when a certain young man not meanly learned did happily enough profess the Greek tongue, "a barbarous fellow in a popular sermon began to rail against the Greek tongue with great and heinous revilings."

Science has had to encounter opposition not only from scholars but also from practical men. It has seemed to the latter that there was an impassible gulf between theory and practice; that book-knowledge was not of much account in the varied walks of life; that even the sciences of mechanics, dynamics, chemistry, and other branches which have a decidedly practical bearing were valueless in comparison with the observations of working men. How rapidly this is changed! The telegraph, fruit of scientific study; the Bessemer process, resultant of profound research; the innumerable processes and discoveries of chemistry; the construction of engines, bridges, aqueducts, and roads; the eradication of fevers and

cholera by sanitary inspection and advice ; the accurate work of skilful topographers and geodesists, — these, and ten thousand illustrations have taught the plainest and most practical men the value of science. Indeed, whatever prejudices still exist against science are due largely to the blunders and mistakes of that which is not science, but ignorance.

The noon is already at hand. Soon the students in the liberal arts, and the workers in the useful arts, and the beautifiers in the fine arts, will be agreed that science must be promoted. And it will only be a question how shall this be done.

A sudden and effective impulse was given to scientific and technical education ten years ago by a congressional enactment proposed, matured, and adopted under the leadership of Senator Morrill, of Vermont, then a member of the House, who received efficient co-operation from individuals in different parts of the country, deeply interested in the promotion of agricultural science. The land bestowed by this act of 1862 was not directed, as many persons still suppose, to the establishment of mere agricultural schools, but to the foundation in every State of one college at least, in which the leading topics of instruction should be those branches of science most closely related to agriculture and the mechanic arts, without the exclusion of literary and classical studies. It is not surprising that every loyal State stood ready to accept with promptness a grant so generous in amount, so free in its conditions, and so accordant, in its main purpose, with the demands of modern society.

Hence, without any controversy respecting the management of the long-established classical colleges, education in science came at once into vogue throughout the land. In the forests of Maine, in the diggings of California, in the mines and iron-works of Pennsylvania,

on the prairies of Illinois, in the work-shops of Connecticut, in the commercial marts, in the old universities, in the half-fledged colleges, in school conventions, in farmers' clubs, in educational documents, in books and journals, scientific and literary, everywhere among thoughtful Americans, the use, the methods, the objects, and the tendency of scientific and technical training have been amply, if not always wisely, considered and discussed.

The result has been, that with American quickness and prodigality, and with American indifference to experience and precedent, a score and more of institutions, good, bad, and indifferent, each independent of all others, and each imperfectly manned and endowed, have been commenced within the last ten years. These infantile seminaries, some of them born out of due time, are hardly so much alike as to suggest a common parentage, or to justify a family name; though more than one of them, in daring and vigor, might be termed a young Hercules. One State maintains, from the proceeds of the national grant, an Industrial University; another, an Institute of Technology; a third, a Scientific School; a fourth, a Cornell University; a fifth, a school of Agriculture, and so on through the list. The internal organizations evinced in the requirements for admission, the courses of study, the conditions of graduation, the attainments of the teachers, and the aim of the scholars, differ more widely, even, than the names. The diversity arises unfortunately from the struggle for life rather than from the struggle for individuality in character, each separate foundation being more the creature of circumstances than the result of conference, forethought, and a nice adaptation of means to an end. Mistakes have doubtless been made, unwise compromises accepted, impossibilities promised, — and yet with all these drawbacks, we do not

hesitate to assert that a vast amount of good has already been accomplished. In every State of the Union, there is soon to be at least one college where, without hostility towards, or the forced exclusion of, literature or the classics, nature and her laws, science in its applications, the Creator and his works are to be the principal subjects of study. Before the plans and methods are worked out by which this end is to be secured, we must expect that ideas crude and wise, experiments found useful and found foolish, processes demonstrated good and demonstrated bad, will be brought up for scrutiny, in all sorts of social circles, among statesmen, capitalists, scholars in literature and scholars in science, reformers, artisans. At length the country will settle down upon a system of scientific and technical training, corresponding with the present condition of human knowledge and the manifold requirements of modern civilization.

From a somewhat careful examination of the various institutions created or transformed by the national grant, we have been led to make the following generalizations:

1. There is at the present time in this country, a hearty and general, if not a unanimous recognition of the value of superior schools of theoretical and applied science, so that States, communities, individuals, and sometimes, even, classical colleges, are willing to devote large sums to the maintenance of such schools or departments. Open hostility to these modern means of education has disappeared, though there are still remnants of distrust, and sometimes of jealousy, in respect to the rapid growth of scientific colleges, on the part of those who have been trained in the classics, and who have not examined with attention the scope and purposes of the new foundations. This distrust has been occasioned in part by the incomplete and unsatisfactory training given in some places under the name of science, in part by the

establishment of "partial courses" in the older colleges, and in part by the foolish tirades against literary culture which are sometimes heard from practical men; but both distrust and jealousy are rapidly disappearing before the growth of institutions in which sham and superficial science are scouted, and in which there is an obvious love of truth and culture, however it may be attained.

2. There has been a great lack of system and co-operation in the efforts which have been put forth, so that there has been an unfortunate duplication of plans, and a failure to recognize with distinctness the special wants of different parts of the country. There has been a noteworthy confusion of three distinct aims, to wit, the prosecution and encouragement of science, the application of science to industry, and the elevation of the laboring classes. It has been almost impossible to drive out of the public mind a notion that the congressional grant was given only to agricultural colleges; by which most persons have understood elementary schools where the sons of farmers may be trained for more effective labor on the farm. Undoubtedly, in our decentralized government, and with our deeply seated dread of national superintendence and inspection, the evils which have arisen by leaving to local boards the determination of this grant, are less than those which would have arisen from any attempt on the part of congress, or the cabinet, or any national commission, to regulate in each State the organization of these schools. Nevertheless, it is true that there is not so much harmony, nor co-operation, nor definiteness of purpose as might fitly be expected when a so-called practical people undertake a so-called practical business.

3. It is commonly conceded that schools of science should be distinct organizations from classical colleges. They may be under the same trustees, and in the same

town, so as to economize wisely the use of established collections and accumulated apparatus; they may bear the name of departments in a college or university; but they should not be partial or modified courses, half as good as the classical, looked down on by the faculties and students of the classical courses. It is desirable that they should have independent funds, teachers, laws, halls, and be distinct colleges in fact, whether they are so in name or not; for, as long as there is any pretext for calling schools of science "colleges with Greek and Latin left out," they are not worthy of the name of schools or colleges of science. They must have positive and distinct merits of their own, in order to command confidence, or to be of much service; and this is true whether they are established on entirely independent foundations, or as members of some institution or university which has already acquired the support of the community.

4. The schools of science established during the last few years have been generally of the grade called technical; by which we mean that they have a predominant reference to the wants of young men who desire to fit themselves for such pursuits as involve a knowledge of science in reference to human industry. They are schools of applied rather than of theoretical science. At Harvard and Yale the theoretical or purely scientific character is better kept up than it is in most such institutions. There is a strong desire, if I am not mistaken, to train up in these two schools investigators, scholars, men of research, observers, explorers, philosophers, writers, teachers, but really men who shall add to human knowledge, who shall advance science, and shall be the pioneers in the work of scientific education. The school at New Haven has already sent out scores of young men to be professors and teachers in other institutions, and doubt-

less a corresponding number have been trained in Cambridge, though there are no published data at hand for comparison. But both these schools show also a decidedly technical character in the instructions they offer; while most of the other institutions yet established, bearing the general name of scientific schools, are chiefly or exclusively directed to training up technical men, and should therefore be classed as polytechnic schools. They may be polytechnic schools, with strong scientific tendencies, or with strong industrial tendencies; according to whether they tend to promote investigation in science, or are chiefly directed to the advancement of human industry.

Moreover, it is very hard in this country to secure from public appropriations or from private generosity, endowments for purely scientific chairs. We are not beyond the utilitarian appreciation of science; and it would doubtless be easier to secure five hundred thousand dollars, or a million, for a school of applied science, than a tenth of that sum for an institution of which the exclusive object should be to train up a body of scientific investigators. But let any one who doubts the importance of this limited and unappreciated class of students, read the recently printed address of Dr. Gould on the relations of the man of science to the community, or an earlier one by Dr. Playfair, of Edinburgh, on a kindred subject.

5. The great cost of high schools of science is by no means appreciated. The necessity for having men of distinction in special investigations, and for having a great many special teachers, and for having ample means of experiment and illustration, — all this is very imperfectly understood. The readiness with which men of truly scientific attainments are caught up to aid in the construction of public works, the development of mines,

the exploration of new territory, the administration of great industrial establishments, and in numerous other services, renders it difficult to retain them as the instructors of youth, on the meagre allowances commonly bestowed for educational services.

6. Again, we have yet to discuss in this country a great variety of questions pertaining to scientific education, to which we have hitherto not come up. The methods to be observed in technical training; the proper preparation for scientific pursuits; the supplementary or historical and linguistic studies, which should be simultaneously pursued with scientific studies; the right mode of maintaining industrial schools, so that working men may have real scientific knowledge pertaining to their work; the right methods of teaching drawing, so that the hand may delineate truly whatever the eye observes; and the right method of training the eye, so that it may see aright, and impress vividly upon the brain the phenomena and objects of nature and art; the awakening of a love of nature in the very young, cultivating their minds by attention to, and familiarity with, the beautiful world in which they are placed, rather than confining their attention to the printed page; all these, and many more such topics, deserve an early and careful consideration from parents, teachers, writers, and all who are interested in the education of the rising generation.

7. So far as we can judge, the most serious cause for apprehension yet developed lies in the multiplicity of attempts which are sure to be made during the next few years, to satisfy the acknowledged demands of modern society. In addition to the institutions which have received the national endowment, several of the States in the East have other similar foundations, due to private liberality; and almost every one of the classical colleges,

while still but half endowed, evinces a desire to assume the additional task of providing special scientific training. We are in danger of having as many and as poor scientific schools as we have of colleges, and are in risk of scattering our forces through numerous experimental inefficient beginnings, rather than by the concentration of capital in men and funds upon a few promising and central foundations. Because schools of science are a necessity, it does not follow that a hundred of them should be begun, before a single one is adequately endowed; nor that we should endeavor to multiply too rapidly the schools of technical instruction of a lower grade while the higher training places for teachers and investigators of science are still so imperfectly organized.

8. Finally, judging by the experience of foreign countries, and by the rapid progress of our own, we may presume that it will not be long before we shall see some such development of our systems of education as this:—

#### I.

A very limited number of universities, certainly one, probably several, possibly many, in which all the studies of a university may be well pursued, to which young men will resort for the highest sort of scholastic training, and to which they should be refused admission, unless they have previously been well trained for a considerable period in the institutions of the next lower or collegiate grade.

#### II.

A division of our colleges, doubtless hundreds in number, into two sorts: those of Letters, and those of Science. In the former, the training will be chiefly linguistic and historical, with a considerable amount of pure mathe-

matics, and a general introduction to chemistry and geology, and perhaps other branches of natural science. In the latter, the instruction will be largely in the mathematics, and in the exact sciences of observation and experiment, while linguistic training, especially in the modern languages, and historical studies, will not be overlooked.

In the colleges of science of this grade, professional or technical instruction will be likely to predominate over studies of a purely disciplinary character; in the college of letters, the reverse is sure to be the case.

### III.

A double course in academies and high schools, — the one leading, by the discipline of Greek and Latin, to a classical college, and the other, by the discipline of the pure mathematics (algebra, geometry, and trigonometry), to the scientific colleges. Both of these courses will admit of modifications, according to circumstances, for scholars who may not expect to go up to the higher colleges.

### IV.

Decided improvements in our elementary public schools, in which the eye, the hand, and the ear shall all be trained to help the intellect in acquiring and imparting knowledge; improvements which can be largely secured by teaching the child to observe and investigate the phenomena of nature.

# LECTURE,

BY

REV. H. N. HUDSON.

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## HISTORY IN SCHOOLS.

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THE statistics of the Boston Public Library furnish some matter for pretty grave consideration. It appears from several printed annual reports of the institution, that some five thousand volumes of the worst books in that rich collection are read more than all the other hundred and fifty thousand volumes put together. Among the volumes so much read, Braddon's and Southworth's novels are set down as taking the lead. And generally the coarsest, flashiest, and most sensational works of fiction are in much the greatest demand. In comparison with these, even the better sort of novels, such as Scott's and Brontë's, stand hardly any chance at all.

I do not know particularly how the account stands with other public libraries in Massachusetts; but I apprehend it is much the same as with that of Boston. And if such be the case, I think it may well be questioned whether, after all, a majority of the people are likely to be any wiser or better for knowing how to read. Certainly, if I had a number of sons and daughters, I would much rather they should not be able to read at all than that their reading should take to such vulgar and debauching stuff as the works in question. I believe that, for all worthy purposes, they would know more in the end; would have more of sound practical sense, and a solid preparation for the proper duties and honors of life. For what can such a continual pouring of the high-seasoned slops of sensationalism do but just wash out all

the brains? But, if this be an extravagant view of the matter, still it must, I think, be admitted that, along with the ability to read, there ought by all means to be imparted some power of guiding it to worthy ends; at least something to keep it from becoming a waste of time. And I trust all will agree with me, that the first business of education is to possess the mind with right intellectual habits and tastes; so that the learner may be duly prepared with an inward guide to what is good and true.

At all events, it cannot be amiss to set ourselves upon inquiring earnestly whence comes the prevailing tendency to reading so steeped in falsehood and disease, and how the minds of learners may be drawn in the direction of that which is natural and wholesome. This is, indeed, a wide field of discussion, and I shall confine my remarks mainly to the special subject of history as taught in our schools.

Now one reason, I take it, why so many of our young people, especially our young women, run so greedily after the foolish and damaging novels of the day, is because they have acquired no taste or relish for any better sort of reading. Our school education, whether had in public or private schools, does almost nothing to help them in this particular; perhaps, in many cases, if not in most, it operates as a positive hinderance, by presenting history in such shapes as to inspire them with an aversion to it. Historical matter, as commonly prepared for school use, offers no field for the exercise of taste; has nothing to plant or set it in the mind; being, indeed, little if anything more than the mere chips of history, without juice or flavor, or any attractive quality whatever. As it is in general but a serving-up of the anatomized dry bones and ligaments of the past, so the study of it is mere task-work and drudgery; there is, there can be no free, spontaneous delight in it; it opens no springs of natural

pleasure to the mind; presents nothing to quicken or feed those intellectual sympathies in which the faculties are genially kindled, and which, because the soul is really alive, naturally draw into habits of thought, and knit into a firm texture of mental and moral character.

As for the names and dates and events which our school histories are chiefly made up of, the mere committing of these to memory for recitation involves no proper stirrings of intellectual life; the process is purely mechanical, and leaves the sources of vital interest altogether untouched. And historical matter so presented really has no correspondence to anything in nature or in human transpiration; it appeals to no inward laws or forces, out of which the formation of mental tastes naturally proceeds; in fact, it yields no "discipline of humanity," in any sense of the term, and is good for nothing but for showing off in recitation; while the knowledge, having no root in the natural feelings, nor any blood in its veins, is almost sure to pass away with the showing.

It seems to me, indeed, that our practical notions touching the scope and purposes of school education in this branch are radically out of joint. For these notions proceed mainly upon the supposal that the right use of history in schools is, not to develop the capacities and aptitudes of historical study, but to give a sort of universal smattering in historical knowledge. From this it follows that the pupils are to be carried over the whole world and through the entire range of historic tradition, and to have their minds crammed or stuffed with chronological tables, or with the materials of them.

Now this is really little better than a waste of the time so employed; in some respects it is often worse than that; its natural effect being to breed a weariness and distaste of the whole matter. The charm of such studies is altogether missed. It is a mere listless going by rote.

The mind is not fed, and therefore does not grow. Nor is it by any such process that the true lessons of the past are to be learned. People seem to have got stuck fast, or imprisoned in the idea, that school is a place for *completing* the education, and not for the starting of it, and giving it a certain impulse and momentum in a life-long course of knowledge and activity. In keeping with this idea, we have the study of history ordered with a view rather to filling and furnishing the mind than of forming it, and imparting to it a right bent and direction. A very little just consideration will advise us that this study should be mainly ordered to the end of so kindling and setting the faculties and aspirations, that the mind shall go on feeding soundly and growing healthfully of its own accord, through life. The great thing is, to institute, or, at least, to initiate right tastes, habits, and preferences; to implant and fix just and wholesome predispositions; to secure an induction of the mind in apt and fruitful methods, and to imbue it with an earnest and active spirit, which may carry it onward in a course of noble, useful, and self-rewarding exercise. In short, the right office of school training is, so to guide the young, and so to form their tastes, that they may afterwards be safely left to their own guidance.

We seem to have taken for granted, that if people only have a faculty for reading and study, they will be sure to make a good use of it; whereas facts are proving that there is no faculty more liable to abuse; as they are also proving that people are hardly more fitted to choose their own reading when they leave school than they were at the start. And where is the benefit of our schooling, when it fails to raise people above finding pleasure in such false, stupid, and demoralizing trash as Southworth's and Braddon's novels? At all events, I cannot choose but think there must be something decidedly wrong in a course that lands us in such results.

Yet what else can we expect from the study of history as now conducted in our schools? Why, our school-books in this kind are, for the most part, just about the sorriest things ever palmed upon the world under the name of history. They are mere baskets of chips hewn out in the preterite tenses; "as dry as the remainder biscuit after a voyage." They are got up merely to sell; and, to make a market for them, the public mind is systematically abused out of all right conceptions as to what history means. They are the work, not of authors in any right sense of the term, but of mere book-makers; the process is merely one of literary mechanism, and this too, in many cases, of the coarsest and shabbiest kind. There is no art, nor any of the faculties of art, employed in making them. No life, no motion of taste is involved either in the writing or the studying of them. The "large discourse looking before and after" has absolutely no part in them. The doctrine that "what is noble should be sweet," is not thought of in connection with them. The shaping and informing spirit of imagination never touches nor comes near them, and would be instantly smothered or palsied if it should. No genuine human interest attaches to them. Mental animation, recreation, delectation, they are utterly guiltless of. Beauty and felicity of style and composition, the zest of well-chosen imagery and illustration, the vivid grouping and portraiture, the grave and mellow wisdom that springs up fresh and natural from talking worthily with the past, and the intellectual eloquence that charms and beguiles the reader into thoughtfulness by grace and clearness of delivery,—of all this they have nothing whatever, nor do they pretend to have anything. Any dunce, indeed, with a little practice, can do the botching joinery of them just as well as the highest genius; nay, probably better, since he is in no danger of being drawn

away or tempted into virtue by the vitalities and legitimate interests of historic representation. For a man of genial thought and taste can hardly look old times in the face without being betrayed into some touches that would kindle the reader's soul, and surprise him into happy reflection; all which is against the law of such books as I have in view. In short, the proper wine of historical truth is all evaporated from these compilations, leaving nothing but what is stale, vapid, and flat.

It is plain enough, that such soulless mummies and disguisings can do nothing towards putting students in loving fellowship and communion with the spirit of the past, or even with its forms. The proper attraction and refreshment of the study is utterly lost in such handling. There is no force in them, either to stimulate a just curiosity, or to gratify a sense of handsome and cunning workmanship. No abiding relish for converse with the historic muse can possibly grow from intercourse with them. They neither feed the mind, indeed, nor conduct it to other sources of food. The impression they naturally give is, that history is just the dreariest of studies. The best they can do is to strain the memory upon that which, after all, is not worth remembering; at least, not worth remembering, save in vital combination with those higher elements which are left behind. It requires a very different order of workmanship to awaken a living interest in historical events and characters, and to cultivate a rational insight and judgment in the questions, moral, social, political, and economical, upon which the history of nations and communities has turned.

History, be it observed, in the right sense of the word, is among the highest products of human intelligence; and first-rate excellence in it is among the rarest achievements of authorship. And when worthily written, it is, perhaps, at once the most engaging and most profitable

of studies; for it is nothing less than a concentration of all the interests that belong to humanity. The poetical, the philosophical, the moral, the practical, all the forces that enter into the process of human life, meet and coalesce in its texture. It combines, in the happiest proportions, the natural stimulants and aliments of thought; while in its proper scope and variety of matter it surpasses all other studies in aptness to foster a temperate and harmonious working together of all the mental faculties.

Why the wooden gettings-up of literary mechanics should be thought fitting matter to interest and fashion the minds of the young, quite passes my comprehension. It really seems to me that the very best specimens of historical writing within our reach ought to be selected for use in school. That, surely, is the last place for dishing up the mere chaff and straw of history, such as our current text-books are made up of. For the younger the mind, the more it needs something besides the dry and insipid details of fact and mechanism. That is the very time, when all the arts that minister to rational delight, all that sweetens the walks of thought and study, are most wanted. And school-life is the proper seed-time of right intellectual dispositions, tastes, and habits; let these be wisely and firmly set, and the mind may then be safely trusted to go on feeding and gathering at its will. So that nothing less than the very choicest and happiest preparations of matter to be had should be drawn into the service under consideration. Old heads may not be damaged by drudging among the marrowless bones of the past; but the youthful faculties should be wooed and cherished into action by all the grace and sweetness of living truth, the products of genius and wisdom in their noblest hours.

Another point most needful to be observed is this: To

rush the young mind through a swift, nibbling excursion over the whole historic field, or any large portion of it, is not the right way. This, to be sure, is in accordance with the popular idea, which holds that people in their youth should learn a little of everything and not much of anything; whereas, in truth, as all educators ought to know, such methods can never lead to anything but mis-knowledge, and to a conceit that is far worse than the blankest ignorance. Such a hasty gathering of little specimen chips from all the wood-piles of knowledge may do for those who wish merely to extemporize a shallow and flimsy preparation for driving the trade of teacher; but the process of mental soundness and health, and of that modesty which forms the girdle and cincture of truth and virtue, lies in a very different course. Assuredly, the true way of intellectual growth is by fencing in some moderate and inviting portion or the general domain, and then to have the mind stay and converse there long enough to become really and thoroughly at home with the included matter, and to get a genuine and lasting relish of the mental climate in its special and peculiar qualities. This, say what you will, is the right method of domesticating the principles of truth and nature in the heart, of binding them up with the inward, quiet sympathies and affections, so that they shall be an abiding love and delight, a perennial spring of life and joy; and when this is done in a small sphere, the mind is then invested with a predisposition to recognize and choose the true and the good wherever it may go; and in that state the more it converses with general knowledge, the less it will be blown by presumption and conceit; whereas, an early and ambitious smattering in many things is pretty sure to bring on that sort or chronic indigestion which converts nourishment to wind.

A few words in application of what I have been saying to the particular matter in hand will close this paper.

To take a very few limited periods of history, and to study these thoroughly, and in the very best available delivery that has been given of them,—this is the right way, and the only right way of conducting historical learning in school. To this end, just the highest authors in history, or the choicest portions of them, should be used as text-books. None of your refuse of literary hacks and drivellers, none of your job work, none of your book-making joinery here, if you please. Let us have the best, and nothing but the best. A right use of these will not only impart, as far as they go, a knowledge in the details and course of historic fact, but also, which is far better, will involve such a cultivation of taste and such a generative warming of the mind's inward forces as will cause that knowledge to take root and live and bear fruit.

If now I were called upon to name particular works, I should say, first, that for making the young mind rightly at home with the genius and leading characters of the ancient civilized world, I know of nothing that compares with old Plutarch's *Lives*. The charm and verdure of these are literally unwithering and inexhaustible. Above all other writings, they lead us into the green pastures and beside the still waters of Greek and Roman humanity. They were my earliest reading in history, and they will be among my latest. So long as I have eyes to see, I shall have to keep going back to those delectable old pages. A judicious selection of them, such for instance, as Pericles, Dion, Themistocles, Fabius, Julius Cæsar, Cato the younger, and Sertorius, were worth a thousand times more than all the school histories ever written, or ever likely to be. I must add that the translations in Clough's edition are far better

than Langhorne's, and are, indeed, as honest and racy specimens of English as any one need desire. Next, though I am far from proposing to make any works of poetry a substitute for history proper, I should name Shakespeare's historical dramas and his three great Roman tragedies. No other writings, not even old Plutarch's, come near these for drawing us into the real spirit and character of the men and the times delineated in his scenes. These are anything but a procession of political diagrams and bloodless figures; they are genuine, flesh-and-blood revivifications of the past. Here, the mind may be fairly said to live and breathe with the men of the olden time. Nor need there be any fear lest the vast wealth of poetry should distort or obstruct the rays of historic truth. No one can dwell amid these scenes without having his eye made sharp and quick and capacious for the best instructions of history. In the walks of history proper, I suppose there is nothing else in English so good as Hume, especially so much of him as covers the dynasty of the Stuarts. The civil wars in England are there narrated with a spirit and felicity almost poetic, and in a style so delicious that one must be dull indeed to grow weary of it. That portion also of Merivale's *Romans* which extends over the times of Julius Cæsar and Augustus, is among our best specimens, and can hardly be made too much of in forming the mind for historical study. Froude's is, to my thinking, the best English historical style since Hume; nor, for the use in question, would it be easy to beat that part of his bulky work which is occupied with the reign of Henry the Eighth. In regard to Gibbon's great work, the chief difficulty is what portions to select from such a solid mass of historical learning and eloquence.

A just use of the authors I have named can hardly fail to give an average student such a love of historical

studies, and such an acquaintance with the general modes and principles of national growth and development, as will go with him through life, and be to him a perennial fountain of entertainment and profit. In rightly studying such works, a person will naturally learn how to study other writers and other periods or history, and will be put in possession of the key to whatever of interest and instruction they may have. The mind will be soundly and fruitfully started, its faculties aptly set and tuned for the great lessons of the past. Then, too, what is perhaps best of all, the literary charm of such works, and the sap and flavor infused into them from the genius of the authors, will operate as a standing invitation to return to them, and to read them again and again; and it is the frequent reading of the same books, provided they be of the right sort, that makes the well-formed and well-furnished mind. Nor can I well conceive how any mind tolerably seasoned in such a climate of thought should ever relish the foul and pestilent atmosphere of those five thousand volumes which are read more than all the other hundred and fifty thousand in the Boston Library.

My settled conviction, therefore, is, that the school histories now in use cannot be too summarily dispatched into "outer darkness," and that we cannot be too much in earnest to have them replaced by our standard authors in this great department of study.

## PREScription — ITS PROVINCE IN EDUCATION.

BY WM. T. HARRIS, SUPERINTENDENT OF THE PUBLIC  
SCHOOLS OF ST. LOUIS, MO.

*Ladies and Gentlemen, — Teachers of New England :*

WHEN, for a time, the summer heats prevail, and the energies of the body and mind relax, there comes for the teacher his season of recreation, the long vacation of the scholastic year. The work of the other professions — law, medicine, the church — creates a tension in the body and mind that recreation must relieve. The lawyer, the physician, the clergyman, must restore themselves by flight to “fresh woods and to pastures new.” But the necessity of recreation is greatest in the profession of teaching. While each occupation has its dangers to the one who gives all his energies to his work, teaching is preëminently the occupation that cramps the activity of the mind into certain hard-limited channels, — injurious and destructive, if no counter-irritant is employed. The tendency to become one-sided, to degenerate into a machine destined for a special purpose, — no occupation is untirely free from this. The novels of Charles Reade never tire of portraying the effects of the arts and trades in dehumanizing man. The Sheffield knife-grinders, with the cramp of their occupation stamped on every feature and gesture ; the weavers and spinners, the workers of the iron mills and of the

coal mines, — nay, even the legal counsellors and the medical advisers, — with what readiness their cramp betrays their habitual work ! The reaction of employment upon character is recognized in the old statute that prevented butchers from serving on a jury in murder cases. In Dante's *Inferno*, we have everywhere portrayed the cramping limits of individuality, which have been brought on by habitual acts in life. Man's deed is his own ; and whatever he does, is done to himself : he is self-determined. This is the presupposition lying at the bottom of all codes of justice, and of all prescription in morals and religion.

During the school year the teacher is subjected to a perpetual tension of his energies in one direction. His occupation is that of training youth. He is placed over against immature humanity, — children full of caprice and arbitrariness, full of ignorance, and the tendency to yield to the immediate promptings of animal instincts. He must restrain, hold back, and repress these immediate impulses, and substitute for them the habits of acting according to the broad forms and conventionalities of rational existence. Exerting all his vigilance, all his self-control, he applies a firm, steady pressure to the material under his charge, and moulds it into form. But the strain works injuriously upon him ; and unless he counteracts it by powerful remedies, he loses his elasticity, and destroys the balance of his character. He becomes arbitrary and capricious, and full of idiosyncrasies, the counterparts of those he endeavors to correct in his pupils. After his elasticity is gone, and stiffness and crabbedness have taken its place, his demeanor among men mark him out as a "pedagogue," in the odious sense of that term. The pedagogical cramp, as it existed in the generation before us, has been described by Goldsmith, Walter Scott, Dickens, and Irving. With a slight

shudder, we turn off our eyes, and are thankful that we are not as they were in that day. Change in modes of discipline and modes of instruction has done much for us.

The remedy, however, for the evil, consists in timely prevention and the frequent resort to recreation. Society has recognized the importance of this by breaking up the school year with vacations of sufficient length to relax both teacher and pupil; so that the former may regain his upright position, and the latter heal up any tendency to break, caused, perhaps, by too sudden bending.

But the practical question, after all, is this : How to use properly these vacations, — how to recreate effectively ? The importance of bodily exercise and fresh air, change of scenery, — this is conceded on all hands; but the recreation of the mind is far more important. The teacher should resort every day to his mental bath in the fountains of genius. The perennial springs of Shakespeare, Goethe, Dante, Plato, Aristotle, and Homer, will recreate him afresh for his labors; and no other recreation is like this. He will find in this the cure for his cramps, both natural and acquired, so that he may remould his own character from day to day, like new material, while performing the same office for his pupils. Daily and weekly, as he climbs up the steep sides of the eternal mountains of genius, he loses sight of the lowly vale and the school-house there situated, and is refreshed by the bracing air and the open prospect, so that, on his return to his duties, he brings with him originality and vigor. Intercourse with genius frees all minds from narrow, special limitations; and above all this is the medicinal effects the teacher needs. It is the poets especially that one would recommend, for they relieve the tension of the *will* in the best manner. Study of the

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great philosophers relieves the mind of the pedagogical dogmatism it is so prone to fall into.

While each day has its recreation, the longer vacations furnish occasion for still longer journeys into the realms of genius, and for quiet repose amid the healing influences of family and social life.

Mere physical travel, mere sight-seeing, mere rest of body, will not remove this pedagogical cramp; the *mind* must be recreated, born again out of its limitations through the potent effects of that bath just named which we may name the true fountain of youth. As the aged Ponce De Leon wandered out in search of the cure for his decrepitude, mis-reading, — as many others have done, — the mystic poems of his time which sang of a spiritual new-birth, the fountain of divine ideas

“ That always finds us young  
And always leave us so,”

the teacher must sail direct for the land that is no figment of the imagination like that the heart-sick Spaniard sought.

It is a tribute of respect to this view of things, I am persuaded, that induces so many to make their annual pilgrimage to this American Institute of Instruction which we may well call venerable by comparison with the recent dates of similar organizations in this country. The free interchange of thought on the nature and scope of the work in which we are engaged is the open and direct means to the preservation of health and sanity.

### PRESCRIPTION THE CONTENT OF EDUCATION.

Inasmuch as the province of the teacher's labor includes the process of checking and repressing what is arbitrary and capricious, and the induction of what is rational in its place, we may speak of it as the domain of *prescription*.

- The dangers resulting from its negative reaction — those just now contemplated as the occasion for reaction on the part of the teacher — are merely incidental to the great function of education. The broader view shows us all human life as a process of growth and development, wherein what is real and directly present at any one stage is merely the rough material and stuff from which to build anew a nobler structure and inwork loftier ideals. Every completed stage of culture says like the stone in quarry: —

"Yet am I still, material for all;  
Use me as such — I answer to thy call.  
Nay, tread me only under climbing feet,  
So serve I thee, my destiny complete;  
Mount by me into purer, freer air,  
And find the roof that archeth everywhere;  
So what but failure seems, shall build success;  
For all, as possible, thou dost possess."

The transformation of what is here and now realized into that which shall embody the new ideal is the process of inworking prescribed purposes.

The problem of prescription is the profoundest and most important one in education, and without its solution we continually drift in the eddies of fruitless experiment and waste the energies and possibilities of the rising generation.

It is, therefore, appropriate that we give this theme our earnest attention for the brief hour we occupy with this essay.

The world as it appears to man is two-fold, and the two sides thereof are antithetically opposed. The natural world is opposed to the world of spirit; the former the external and the latter the internal. In the world of nature, rules necessity or external modification; in the world of spirit or mind, freedom or self-determination is the first principle. In the realm of nature each process follows its

prescribed law; the planets roll in their orbits; the seasons change; the meteorological process goes on. Crystallization, vegetation, and even animal life, transpire through the effectuation of external causes. They form each only a link in a large circle or chain of reciprocally related events. The correlation of these is the manifestation of the deeper unity which underlies them and prescribes their course. All in nature is prescription speaking figuratively; — it is under the dominion of external law, and spontaneity does not present itself anywhere as an object of immediate perception. The totality of conditions constrains each being in nature; and when we have defined this totality we have prescribed the function of the individual. Not only is this true, but the identity of the individual with that of the totality of conditions is so complete that we may ascend from the individual to its including totality by simply observing the former. Thus, the observations of Leverrier upon the behavior of Uranus led to the discovery of the planet Neptune; thus the behavior of light in the spectroscope leads to the discovery of the constitution of bodies from which it emanates. The realm wherein prescription is the complete and only law is a realm of fixed and dead results. Individuals rise, flourish, and decay, and leave behind no proof of their independent existence, for they had no independent existence; their life was only the process of the totality, and they were mere phases of its manifestation.

In strict language, we should deny to such beings the possession of individuality. They are not individuals in the same sense that persons are, but mere transitory phases. Even the vegetative and animal processes, wherein the individual includes so large a portion of the total process, there is no strict individuality. The acorn sprouts, becomes a vigorous oak, bears acorns, and finally perishes. The first acorn perished in the ground and

lost its individuality in order that the oak might be and produce its crop of acorns. But the acorns thus produced were not the identical acorn we started with. The process began with an acorn and ended with an acorn, but not the same. Thus, too, in animal life, the species live, but the individual perishes. All this follows from the fact that the individual is inadequate to the manifestation of its total or entire being. It is externally determined through its totality of conditions and gives way for the realization of other phases which are potential to it. Its self lies outside of it, and the whole history of nature is the eternal tragedy celebrated in the Eleusinian mysteries, the worship of Osiris, the death of Adonis, and the like. It is the continual, persistent search for true individuality, and is always accompanied by the loss of its own life and individuality at the very moment of finding it. This aspect of nature has occasioned great terror to man throughout his whole history. Conscious being looks into the abyss of nature with a shudder ever renewed at the sight. From this cause he has alluded in one shape or another to this fundamental defect of nature, not only in all his cosmogonies and theogonies, but also in all the great institutions of his civilizations.

In contrast to nature as this province of necessity ascends the realm of human nature as the domain of freedom. Here, too, the prescriptive holds sway, but in a far different sense from that found in nature, as such. The self of matter is an external necessity to it; the self of mind is an internal necessity which it organizes by and through its own activity. Hence, man finds his problem of life to consist in the genesis of ideas and the organization of the world by their aid. He thus makes for himself a substantial home, the heritage of culture, — the institutions of civilization. In this, man the individual realizes the existence of a totality which tran-

scends his mere individual existence. The institution lives on, outlasting a thousand generations. Man has a universal being and a particular being. Natural beings are particular and not universal. He projects and realizes his universal being in these institutions. He thus makes a totality of conditions for himself, — the counterpart of nature. In the material world the universal is destructive of the particular existence; in the spiritual world the universal is affirmative and preserves the individual. Man thus reinforces himself and adds to himself what makes up his deficits. This is what we call reason; the indwelling of the universal in the particular, so that the individuality is at the same time a totality.

Human history, regarded as the realization of reason, has three great epochs. The relation of prescription to the free spontaneous life of the individual assumes a different form in each.

I. Lowest in rank and least separated from nature, is the mere savage, as he lives on the islands of the South Sea, or in the jungles of Central Africa. Even in the lowest stage he possesses institutions in the rudimentary form. He has projected or discovered in some degree a higher and more universal life than his merely animal existence. He has his chief, — the symbol of his existence as a community; he has his juggler, or priest-physician, — the symbol of religion; the rudiments of marriage and family life are there. But comparing him with what the human race has achieved in its most favored localities, he is only a mere possibility and no adequate reality of human nature. The light of the sun of the physical world glares on him with unparalleled splendor, but the light of inner consciousness shines as yet only with feeble rays. He scarcely knows himself as a universal being, and hence does not know his true self. He exists merely as caprice and arbitrariness.

II. The second epoch of human history includes the civilizations of the orient, — China, India, Persia, Phoenicia, and Egypt. Here we find prescription attaining its one-sided and disproportionate predominance over spontaneous activity. When man first comes to perceive universal and necessary ideas, his admiration of them is without bounds, and he organizes them in institutions so substantial that they resemble the iron sway of natural laws in the material world. Caprice and arbitrariness are held so hostile that any harsh and crushing regimen is not too severe for them. The universal is separated so far from the particular, that it becomes a thin abstraction, and the institutions are enormous machines for the annulment of the spontaneous manifestations of human nature. The state, the community, religion, exist; they are the embodiment of man's universal, of his ideal totality. But the particular individual shall subsist only as the symbol of the prescription to which he conforms his life.

III. In the third and highest epoch of human history, the spiritual in man is identified with his spontaneity, and the prescriptive continually recedes from its abstract and exclusive sway. Europe is the theatre of its evolution, and America and the whole earth are destined to become the stage on which its realization is completed. Greece and Rome form the transition; the former, the aesthetic and theoretic; the latter, the practical, or jurisprudential phase of the same. The Christian civilizations are its development into concrete fulness and strength.

In the first stage, man is conscious and spontaneous, but not rational or free. In the second stage, man is conscious and spontaneous, and has evolved rationality and freedom in the form of institutions; but has not been able to unite in himself these two sides. It is the third

stage which takes for its problem the reconciliation of the two sides of the antithesis; and our modern history exhibits the fulfilment of this desire which is the guiding impulse, the providential purpose of the life of humanity.

In order that we may see in the clearest light the problem of prescription, we must glance for a moment at its purest and extremest realizations.

China is the land of prescription without subordination to spontaneity; the maximum of the former the minimum of the latter. The resulting forms are so extravagant that we can scarcely realize in our minds the conditions of their existence; we cannot abstract from our own mode of view sufficiently to think of life in those forms. "In China," says a thoughtful historian, "the five duties are the staple of education; (1) there is the duty of the emperor and the people towards each other; (2) that of fathers and children; (3) of an elder and younger brother; (4) of husband and wife; (5) of friend and friend. These duties are regulated and established by law. The son may not accost the father when the latter comes into the room; he must seem to contract himself to nothing at the side of the door, and may not leave the room without his father's permission. When the father dies, the son must mourn for three years, — abstaining from meat and wine. The business in which he was engaged, even that of the state, must be suspended, for he is obliged to quit it. Even the emperor who has just commenced his government, does not devote himself to his duties during this time. No marriage may be contracted in the family within the period of mourning. Only the having reached his fiftieth year exempts the bereaved from the excessive strictness of the regulations, which are then relaxed that he may not be reduced in person by them. The sixtieth year relaxes them still further, and the seventieth limits the mourning to the

color of the dress. A mother is honored equally with a father. When Lord Macartney saw the emperor, the latter was sixty-eight years old, notwithstanding which he visited his mother every morning on foot to demonstrate his respect for her. The new years' congratulations are offered even to the mother of the emperor; and the emperor himself cannot receive the homage of the *grande*es of the court until he has paid his to his mother. The latter is the first and constant counsellor of her son, and all announcements are made in her name." The merits of a son are ascribed, not to him but to his father. When on one occasion the prime minister asked the emperor to confer titles of honor on his father, the emperor issued an edict in which it was said: Famine was desolating the empire, thy father gave rice to the starving; what beneficence! The empire was on the verge of ruin; thy father defended it at the hazard of his life! what fidelity! The government of the kingdom was entrusted to thy father; he made excellent laws, maintained peace and concord with neighboring princes, and asserted the rights of my crown! what wisdom! The title, therefore which I award him is: Beneficent, Faithful and Wise. The son had done all that is ascribed to the father. In this way ancestors obtain titles of honor through their posterity, — a fashion exactly the reverse of our own. But in return, every father of a family is responsible for the transgressions of his descendants; duties ascend but none can properly be said to descend."

The whole life and education of the Chinese is one of prescription. Even their alphabet is such as might be expected from the Mongolian civilization; a complex sign for each word, and no possibility of analysis into simple elements. It is an iron mould which reacts on all the people, — forcing them when young and plastic into prescribed habits, — compelling each one to rely on

his memory and to seek his guiding principle in something external. The Chinese youth begins to learn to write by memorizing the shape of a complex sign for the first word, and another for the second, and so on until he has memorized several thousand before he can graduate as a scribe. He very naturally becomes a copyist in everything he does. The hand of Confucius, reaching down through twenty-five centuries, holds him firmly in the prescribed path.

As in China, so in the other oriental forms of society, — the status of the individual is fixed in a far more definite manner than in Europe. The chandāla caste in India is the lowest; its individuals cannot ascend to the next higher caste; they must forever remain distinct in their marriages and employments; while the Brahmin is born foreordained to a blessed life in this world and the next. The institution of civil society in India is a vast web of fate which overshadows the individual, and prevents the nobility which is thought essential to humanity in Europe and America.

If we come westward and look through the European states, we find a constant progress toward the elimination of mere external prescription; in our own country we aspire to the realization of the complete spontaneity of the individual. The accident of birth shall not count against self-determination here. Every man is waited upon at birth by the totality of surrounding conditions, and pressingly invited to show what power of will there is in him. There is opportunity and occasion for his greatest and highest deed.

In the midst of so great nobility, here it is that our greatest danger lies. When one points out the crushing preponderance of the prescriptive element in the educational systems of Oriental states, we congratulate ourselves on our freedom from its influence. In those

countries where all moves in accordance with regulations and usages handed down for centuries, — where no individual dares to take a step except in a prescribed track of his forefathers, — a dead, mechanical quiet reigns; everything is fixed and prescribed for him from without. In this country, where an attempt is made to give the individual a wider latitude than ever before, we find the sharpest phase of opposition to prescriptive method as such. Continually in the history of our institutions, individuals and sects arise that advocate the cutting loose from prescription to such an extent as to throw us upon the caprice of the moment for the direction of our course. We thus go too far and are obliged to retract.

It is not difficult to explain this phenomenon. We are a community formed from a new synthesis of nationalities, each bringing with it its peculiar idiosyncrasies. A motley composition is here collecting, out of which to fuse the future people of America. Especially in the geographical centre of the United States and on the borderland northwest and south, is this fusion going on. Immigrants from all parts of Europe, and even from Asia, meet in one community with representatives from all sections of our own country. All shades of political freedom or despotism are represented here, — the German, the Frenchman, the Italian, the Dane, the Irishman, and Briton; the white man and negro, even the "heathen Chinee," — all exist and will exist in one community. History has taught us that a composite population tends more to the development of civil liberty than does a homogeneous one. Where people of repugnant manners and customs mingle, the necessity of living in mutual harmony and co-operation cultivates a habit of toleration; each one learns to distinguish between what is mere harmless idiosyncrasy and what belongs

to the essential conditions of humanity and civilization. Thus there is, perforce, a profounder mode of thinking cultivated, — “a faculty of seeing identity under differences,” — of recognizing personal virtues under strange exteriors. And this is, no doubt, the spirit that will prevail in all future civilization; for the telegraph and railroad communication, intellectual and material commerce all over the world, bring mankind into so close juxtaposition that each one lives as it were on the border land, and shakes hands with the people across his frontier. Everywhere a new synthesis of national characters is going on. Each one clashes against the others, and the collision loses much of its angularity; the nobler traits of character survive, for they have most vitality. To the thinking man who looks on this scene, it seems that differences of customs and usages — the prescriptive conventionalities of peoples — are subordinate to humanity itself. Toleration becomes the ruling motive, and we adopt the principle: respect your neighbor’s right; vigorously defend his right to his own mode of thinking, even if he is your enemy.

While we become indifferent to prescription, and allow free sway to the caprice of the individual, under the name of the right of private judgment, a confusion arises as to the boundaries of toleration. Toleration and license are two very different things, although the first stage of free thought is apt to confound them. The right of private judgment is sacred and to be respected; the right or license to *act* as one pleases, can never be granted with impunity by society. Action can never be free unless it is moulded in the forms of justice and right. Here we strike at once on the realm of prescription again. The will as universal, must and does prescribe the forms of individual action. The laws and usages of society and the state are the forms of universal will.

Institutions are the organized forms slowly projected from human history as the net result, the concurrent testimony of the race as to the forms of free action. Each man shall have his private judgment, even though it be a wrong one; but a toleration which should allow every one to *do* what he pleased, whether right or wrong, would prove self-destructive. A man's thought belongs to himself; his deed belongs to all.

Freedom, therefore, has two sides: one of absolute toleration, which permits and encourages difference of opinion, and trusts that the freest exercise of thought is the healthiest, and will lead in the surest way to the absolute truth wherein all convictions shall be united in one. The other side is that of subordination to law, wherein each man squares his deeds by the universal rules laid down in the statute books and prescribed by the judicial function of the government, wherein each man not only squares his own deeds by the universal norm, but at the same time insists that each and every other man shall square his deed by the same norm. Here we have spontaneity and prescription side by side.

When we reflect that prescription comes in from the side of realized reason, and consists in regulations found to be rational by the experience of mankind, and embodied in the institutions of civilization, we must be convinced of the utter hopelessness of eliminating this element from life. Prescription must exist in the substance of what holds sway, so long as man remains a rational being. For the institutions of civilization are the spiritual substance wherein man finds his essential being. By them he transcends his mere particular existence, and is lifted up to the universal, and, as it were, each rides on the shoulders of all.

On the other hand, that self-activity, or spontaneity, freedom of thought, — the realization of directive intelli-

gence in each and every individual, — that this shall prevail more and more, is our deepest national conviction. And the solution of the antinomy must involve the perfect reconciliation of the two sides, so that neither element suffers, but rather gains in force; and each individual is perfectly spontaneous and self-determined, while in the broadest sense rational and swayed by universal ends. The extremes of arbitrary individualism revelling in caprice, and of the crushing formalism of universal rational will, tending to centralization and absolutism, shall thus be perfectly mediated in the self-conscious purpose that widens its circle of private aims into the comprehensiveness of the universal.

Inasmuch as pedagogy has for its province the mediation of these two sides, it must solve the contradiction of prescription and spontaneity. The school is the stage on which the transition takes place from obedience to external authority into free action from personal conviction. In their first stages, prescription and spontaneity are opposed, and mutually limit each other; where one begins the other ends. The Chinese allows free play to his thought only outside the maxims which govern the minute concerns of his life. Like the child who has not yet acquired strength of mind to find freedom in sober work the old Chinese enjoys kite-flying. The progress of mankind is marked by the interpenetration of the two provinces; free thought taking up and comprehending the prescription embodied in the institutions of civilization. A mandate prescribed loses its external, mechanical side, just as soon as its necessary ground is seen and comprehended. Freedom of thought, attacking the external character of institutions, must gradually see their essential nature and learn to affirm them with complete conviction. Enlightened reason says, these institutions are here without my conscious assistance; I did not place

them here, and I gave them no authority over me; but now I perceive very clearly that they possess inherent necessity; and that only in such form as they establish, is it possible for the individual to become a rational being at all; in fact, if they did not exist, I should, with my present insight, devote my whole life to their establishment.

When the individual has reached this insight into the nature and necessity of institutions, and comprehends the working of their organic forms, he is a free man. Previous to this point there is more or less separation of his spontaneous, conscious acts, from the substantial acts of his practical will. At the lowest rank are the child and the oriental man; all rational is prescription, and all free spontaneity, mere caprice. At the highest point, spontaneity and prescription have reached the same content, or subject matter, and both unite in the conviction of the individual.

Corresponding to the nature of the institutions here spoken of, education has its twofold nature. The three institutions of the real world of man, relating to his practical will, are the family, civil society, and the state. Besides these, there are three institutions which comprehend both a theoretical and practical basis, and are the institutions of spiritual actuality: art, religion, and science. These six institutions embody the presuppositions of the individual and hold up before him his highest ideal. Upon his advent here, he finds them waiting his arrival like guardian angels reaching down their hands to him and bringing help and comfort. He accepts of their proffered aid and sustenance; he cannot do otherwise if he would. Even the most forlorn and squalid child, born to the outcast from society, finds one or more of these institutions ready with help for his needs.

And in his turn, be he never so selfish, through the beneficent effects of the higher organizations, whose in-

strumentality he cannot avoid, he is pressed into the service of humanity. His labor for wealth must contribute to gratify the wants of humanity.

While the beasts of the fields perish and leave no heritage of culture to their successors; so that each whelp has only a small stock of instincts to guide him, and the life of his dam with its manifold experience has no lesson transmitted to him through rational discourse; man, on the contrary, lives in a universal life, a life of reason communicable to all, and on this account continuous from generation to generation. This life of culture, this participation in the life of the whole, constitutes civilization. It is the spiritual life of man. Education is the instrumentality of its realization; but education in the broadest sense, including not merely what falls in the schools, but the nurture of the family and the initiation into the discipline of society and the state, and into the mysteries of religion.

Education in the school has for its aim the initiation of the individual into the language of these several institutions, — into the "conventionalities of intelligence." It aims to bring to consciousness what is otherwise implicit and merely prescriptive. What the individual is without this, is too well known to need portrayal. It is only through comprehension that he attains to the reconciliation sought. The poetical discipline of ethics only half emancipates him, essential though it be.

For the purpose here specified, school education has to elevate the pupil through three stages of intellectual culture, classified according to the degree in which he rises to a comprehension of the subject matter of his studies, and thereby realizes his freedom. These stages may be characterized as follows: —

1. The elementary stage is characterized by the fragmentary manner in which the material of education

is served up to the pupil. Instead of learning a subject exhaustively, he is obliged to learn superficial phases of it, mere glimpses of it. He seizes everything isolatedly or, at best, in some of its shallowest relations. This is primary education, or, omitting its disciplinary aspect, primary instruction. The elementary shape of this phase of education is not an objectionable feature; or, if it is to be regarded as an evil, it is at least a necessary evil. The first steps of the growth of intelligence are manifestations of weakness and incapacity to grasp things in their synthesis. The thinking activity is not strong; it can take no long strides or wide grasps. In seizing any object whatever, the child catches only some obvious phase or phases, and is utterly oblivious of the deep, essential relations that engross the attention of the veteran observer, or cultured thinker. A "phase" is immediate; can be seized at once; pushes itself into one's way; forces itself on his attention; hence, even the child catches phases of things. But *relations*, on the other hand, are not immediate, not obvious at a simple glance, but involve a higher activity, — the activity of reflection. Thus we ascend from the immediate perception of the child, to the mediate perception of reflection, — from primary instruction to secondary instruction.

2. Observation and reflection, when active to any good purpose, soon teach us that the immediate world of phases is not the true world. We learn, step by step, that every phase is dependent on something else; that the independent, self-existent being is always somewhere behind the reality presented to our senses. Therefore, in every object before us we learn to recognize, not only the seen, but also the unseen and invisible; paradoxical as this may seem, we see the invisible; we look through and beyond the material world directly present, to a world of relations lying behind it, and learn to consider

these relations as the elements of the true and abiding. The paper I hold in my hand, to the child, is a true being, — something as real as he is. He seizes only the immediate phase of it, — the phase of being. But to you and me this paper exists in its relations, and not independently. It depends on air, and moisture, and heat. It has such essential relations to the elements that it cannot exist without them; remove either of them, and it will be destroyed; and if you do not remove them, it will be destroyed. Take away its moisture, and it would crumble to pieces at once; and yet that very moisture, if left in it, will gradually change it, so that, under the most favorable circumstances, it will decay in a few years. This change of the object, brought about by relation to other things in the world, by its dependence, is continuous, though slow. It does not remain the same any two consecutive minutes, or seconds even.

Considering this mutual dependence, or inter-relation of real things in the world, reflection has often said, "If one grain of sand were destroyed, the whole universe would be destroyed." Every reflecting man sees at once that, by the simple law of gravity, the weight of the earth would be changed by the destruction of a single grain of sand; and that the change in the earth's weight would change the weight of the sun,\*— and through this the aggregate attraction of the planets, or the solar system, and thus, too, the system of stars, — the universe of matter would be no longer the same as before.

This second stage of man's intelligence sees relations, and sees all things modified and influenced by these relations, so that nothing would be as it is, or remain as it is, unless its relations were just as they are, and remained so. Secondary education is based upon the culture of reflection, — upon the perception of relations. In our day, the whole realm of natural science has burst

the bounds which confined it during the first epoch of its development. It has gone over to the recognition in a more or less explicit shape, of the essential nature of the relations it discovers in the natural world, and which it formerly looked upon as accidental; or, at least, as incidental, and not essential to the being of objects. Force is not perceived immediately as a natural object; it is a relation, and is perceived only by reflection. It is a synthesis of two objects. Every relation is a synthesis; and when analyzed, will be found to consist of two elements and a bond of unity. There is a "from" and "to," a "whence" and a "whither," to be thought as one, when one thinks a relation. The fragmentary, isolated perception sees the sides of relations, but does not see their process, their connection or relation. They are, in reality, only phases; but the child takes them for things in themselves, and hence thinks them untruly. His undeveloped power of thinking is not adequate to the task of uniting them in their deeper unity. He cannot think the "correlation of forces," seeing all immediate things, to be sides, or phases of forces, which are, in their turn, only links in a great circular movement of force, wherein individuality arises, and is lost in perpetual succession. This standpoint of "correlation," or "reciprocal relation" and "interaction," is the highest stage of reflection.

To this view of the world all is dynamic, an aggregate of mutual relations; all real things seem transitory and phenomenal; while their abstract force, or law alone, seems to be the abiding.

3. Above these planes of intelligence there is a third and higher form of thinking. It is the realm of organic thinking, and deals with self-relations instead of mere dependent relations. While the first or elementary thinking is analytic, in the sense that it seizes things in their

isolation as independent somewhats, cutting off and ignoring their essential relation, — the second, or reflective thinking is synthetic in the sense that it seizes objects in their relations, thereby adding to each object what is found to be implied as necessary to its existence; it does not, however, reduce to unity the mediation here implied; although it has reached a synthesis, it holds the same in the form of antithesis. Hence its universal, its highest principle, is an abstraction. It is inadequate to thinking life or anything organic; hence, it cannot comprehend institutions, or the prescriptive in general. Out of its activity spring negative and sceptical reactions, but no recognition of the truth of institutions as they are. The third, or comprehending thinking, is the object of the highest form of education. It thinks objects as wholes or totals, — neither leaving out their relations, like sensuous perception, nor stopping with mere abstract relations like reflection, which is satisfied with force as an ultimate category. This highest thinking finds the ultimate result to be no blind force, but a living intelligence. It brings the student back out of his pantheistic wanderings through space and time, to the spiritual as the highest goal. He finds that matter is to be explained through mind, and not mind through matter. Of this character is the lofty science of the great thinkers of the race. Plato, Aristotle, Leibnitz, Spinoza, Hegel, — all these find the organic first principle whose actuality is the series of institutions wherein man becomes a total and independent being. No less do their kindred, the great geniuses in poetry and art, Homer, Shakespeare, Goethe, and Dante, concur in the same high doctrine. The exposition of the nature of human institutions through the portrayal of the collisions which individuals fall into in relation to them, is the province of all art worthy of the name.

It is the result which solves the antinomy of prescription and spontaneity. The scholar who reaches this has completed his apprenticeship in the school of mind. He has risen above the allurements of caprice and likewise above the mechanical dead-weight of prescription. He is free in the necessity of freedom, for his will has for its content the universal principles of reason.

To elevate the youth of this land by all proper means and by the most rapid methods into this positive relation to the realm of prescription, is the task of our systems of education. The old attitude towards the same is no longer tenable. Mere mechanical memorizing of the formulas prescribed does not avail; neither does the corresponding form of discipline; external commands and obedience strictly enforced by the use of corporal punishment, these are not any longer prevalent in our schools; they fail to develop the humanity we desire to see. Mere reflection upon physical data, mere acuteness of intellect, analytic and synthetic power, — the scientific devoid of æsthetic and religious culture, will not suffice. Its corresponding discipline by means of diplomacy, outwitting and humiliating, suppressing disorderly traits by appeal to a vulgar ambition to excel others, this will not answer the purpose much better. A great danger lies in this phase of our culture. The negative might of the intellect saps and undermines all that implicit faith which formerly served as the ground work of institutions; scepticism and selfishness pour out in a cold flood over our own land, and over all lands, wherein the "march of the intellect" is the watchword. The Sphinx-enigma which we as a nation must solve on peril of our life, is the question of institutions; what shall we do with the prescriptive? How shall we continue to build a broader and deeper freedom without degenerating into license? Out of the dim future looms the spectral problem: dense

populations, gigantic corporations, hostile array of wealth and poverty, sansculottism, despotism. The only answer we have ready, and in energetic operation, is our system of popular education. Where all are educated there will be such mobility of classes that perpetual interchange will go on throughout the system,—a circulation of blood through the body politic.

But our education must produce other results than scepticism and selfishness. It must educate youth into insight and aspiration. While it takes hold of the little hands, it must lift them up and place them firmly in the hands of those angels whose help makes life worth living; teaching all pupils to reach up and gladly accept the aid of institutions; not in the attitude of passive recipients, but of active participants; for they can reach this end only through insight into the nature and scope of such organisms. If, in our systems of instruction, special stress is laid on the kindling of the aspiration of youth for the mastery of the highest works of genius, we shall graduate from the school many constructive intellects, and many more who will become such through the impulse given them. In our time, the immense success of popular literature brings, and is bringing, ideas home to the community at large, in a shape all can appreciate. What is too profound for the popular apprehension in the shape of science, is easily unfolded through literature and art, so that it produces its legitimate effect. It is the threefold culture of art, religion, and science, that our highest thinking attains and reconciles.

That the individual, weak and puny in his own unaided might, ignorant, and yet lacking the instinct of the brute, may learn to reinforce himself by the accumulated intelligence of the entire human race, is the object of education. Science is not the product of one individual, but like the other institutions, it is the joint product of

the thinking of all ages. In its greatest achievements lie the solutions ready to be applied to all problems. Through self-activity alone can these be mastered. The teacher's highest service is to hold up before his pupils this true goal, and kindle by all means in his power their faith and aspiration into earnest work for its attainment.

## AMERICAN EDUCATION PROGRESSIVE.

BY JOHN EATON, U. S. COMMISSIONER OF EDUCATION

IT is related of an eminent painter, that he remarked as he was about to close his career, after nearly a century's practice in his art: "What a pity it is that my eyes and hands fail me just when I am beginning to understand what painting is!" A fit sentiment for educators, or their most eminent generation or epoch. Each, however perfected, seems to be only ready to begin as the departure comes. How often the richest personal treasures are buried with their possessor!

Histories gather something of the lessons wrought out of experience, and they, says Bacon, "make men wise." Hazlitt observes: "All that is worth remembering in life is the poetry of it." He could well have added, that to the enthusiast the driest facts, and to the mourner the simplest concerns of the departed friend, become poetic. Each present must fill its garner from the preceding past. All full-orbed lives or events are so many pearls. They are indeed separate, but an endless chain runs through them all and binds man to the Creator. The separation of the pearls does not break the chain; the separation of events does not break the divine purpose. Would the American educator trace this unbroken connection in the order of educational events in our country, he may fitly come to the pursuit with an enthusiasm which shall make the driest prose the richest poetry; so shall he catch the inspiration of the fathers and have his soul opened to what they proposed and to what is to come. Would he gather the fruit of their lives and gain what

there is in them prophetic, he must seek it as Elisha sought the mantle of Elijah. The historic is closely related to the prophetic; yet with all our desire to penetrate the mysteries before us, we squander the very philosophy of history, and wantonly drop from our hand the only clew that we can safely follow. Teachers who would be taken up into the secrets of their predecessors must walk with them.

Undoubtedly more original colonists came to this country for the one privilege of serving God according to the dictates of their consciences than for all other motives. This purpose was paramount; under its influence they suffered deprivation, exposure, and savage death; under its influence they reared the home, the church, the school and the state. When the great conspirator would overthrow Rome, he corrupted the young men; our fathers, when they would rear a pure and permanent state, the conservator of liberty for their children and for mankind, "fed the lambs"; they took care of the young. Like that great people whose wonderful training of childhood and youth has preserved their identity the same, whether ruled by Solomon in all his glory, or scattered, peeled, and torn, wanderers in all the earth, our fathers bent all influences in the family, church, and state, to the proper training of the young.

Nothing among us is more *sui generis* than American education. What a writer so well said of England, is pre-eminently true with us: "It is the chief of many blessings derived from the insular character and circumstances of our country, that our social institutions have formed themselves out of our proper needs and interests." Moreover, the grand opening to the West for enterprise has given us, as a people, an idiosyncrasy not badly illustrated in the story of the sick squatter who, in reply to well-meant spiritual admonitions, said that "for

his part he shouldn't care to go to Heaven unless he could be sure there was a big wild country to the west of it."

A just estimate of American education, while not omitting any of these considerations to which we trace what is peculiar among us as a people, must include any other facts, pursuits, ideas, and doctrines, which shape, affect, or influence our character as individuals or as a nation.

Purposely, and I hope fortunately, the form of our subject, *American Education Progressive*, requires neither extended chronicle of events, nor their elaborate discussion, but is satisfied if the progressiveness of our nation in education is pointed out.

Perhaps the first school of which we have any distinct record was the East India school erected in Virginia in 1622 by funds contributed by an East-India ship's company.

But in New England, every sentiment out of which culture proceeded pointed forward and upward. There they believed, as the inner light of the Quakers taught in Pennsylvania that every man had a soul, and every soul was directly responsible to its Maker, thus infusing a philosophy into affairs, new to the practice of Europe, and laying the foundations for an equality of privileges and rights, which placed government under equal obligations to the humblest and the highest.

Prevalent opinions in New England and among Friends in Pennsylvania tore down all walls of partition between classes, however far back into antiquity they date their erection. In New England, especially, the education of every individual, so far as necessary for salvation, was as obligatory as the injunction to preach the gospel to every creature; from a source so prevailing came their doctrine of universal education; it meant educational progress, as regards numbers, while children are born; it

made character the central objective point, and meant progress as long as character is to be formed.

Their earliest school enactment in Massachusetts declares their purpose was first to check that old deluder, Satan, from keeping men from the knowledge of "the Scriptures."

Beginning with Peregrine White, the first child born near Plymouth, an offering for the application of the principle, it would in due time have carried light to every child in the land, had not insuperable barriers temporarily interrupted its universal application. Their idea of their obligation to disseminate these privileges by all appropriate means came out in the constitution adopted in 1780, in which they declared, that they cultivated learning for the great benefit of this and the other United States of America.

Grand men these; their bodies have long been mouldering in the grave, but their souls are marching on.

In New York, Adam Boelandsden, who came over with Governor Van Twiller in 1633, is reported as the first professional schoolmaster.

In the more Eastern colonies, although the school-houses and names of the teachers are not found in human records, the careful training of the young was a custom from the first.

The first school codes indicate, not that instruction was originated by their adoption, but that what had been done otherwise was thus formally taken up by the colony; as in Plymouth it was ordered by the Court, that "three and thirty pounds (the annual cost of the school) should be paid out of the treasury."

Their leaders were, as a rule, alike devout and educated, men of thought as well as action. They brought with them the classical, metaphysical, political, theological, and religious learning of the Old World. It has

long been held that there was a graduate of an English University to every two hundred inhabitants of Massachusetts Bay, in 1650. Some among their religious teachers took rank with the best of their class.

In addition to preaching, they taught the children of the parish. Their clergy long continued to teach as a duty. Rev. Dr. Woods, who taught Daniel Webster, fitted one hundred young men for college, of whom some fifty became ministers of the gospel, and twenty, lawyers. Indeed, they have always, as advisers or patrons, as teachers and visitors, exerted a controlling and salutary influence over education. But the growth of the colonies early created a demand for teaching that the ministry could not supply, and incompetent persons were more and more employed. The felling of trees, the struggle for subsistence, and the sufferings from Indian incursions did not promote erudition. The greater their dangers, the greater their efforts. What the family, the church, and voluntary individual efforts, methods so far trusted, began to fail to do, the whole body of the people in their organized capacity as colonists undertook to do, by ordering through the general court in 1642, a formal provision for schools, "to the end that learning may not be buried in the graves of our fathers, and to exclude barbarism from every family."

The principles which required the governing classes in a republic to be intelligent and virtuous were nowhere denied; but slavery introduced a class that as menials were to be only interested in being governed, and thus furnished a motive for the perpetuation of that class culture practised in the Old World.

The necessity and popularity of the first doctrine prevailed so far as to ingraft itself into every State constitution in time; but the resistance to efficient State educational action, which defeated Thomas Jefferson and his

associates in Virginia, resulted in the so-called Southern States in legislation, and organization so imperfect that the public schools were only for the poor, and received often the designation of pauper schools. The abolition of the schools for the poor and the establishment in their place of those for all classes cost a fearful struggle in Pennsylvania.

For a period the most that any State did was to pass laws for the guidance of towns, cities, or counties, leaving the levying of taxes and establishment of schools to the smaller civil units. Taxation by the State came by degrees, so of reports of local action. A fee for tuition was usually charged. New York, Michigan, and Connecticut long continued it, and New Jersey only made her schools free at the last session of the legislature.

Connecticut, the first to provide for a State school fund, did not do so until, in 1793, the statute was passed selling the Western Reserve lands and setting the income apart for this purpose; and it still remains for such a use of these funds to be devised that they shall only and always result in promoting and not in hindering educational effort. In New York, Gideon Hawley became Superintendent of Common Schools in 1813, at a salary of \$300 per annum. By the constitution of 1822, the proceeds of all lands belonging to the State was constituted a fund for school purposes. Massachusetts did not establish her State school fund until 1834, and the statute, which constituted her State Board of Education and provided for a secretary whose time was to be devoted to the improvement of the schools, was not passed and approved until 1837; Horace Mann, that prince among educators, being the first Secretary of the Board. Thus late and slowly came that State inspection, supervision, and organization which has been so widely the main-spring of the vast improvements since. How gradually has the effi-

ciency of supervision been extended by subdivision and co-operation in city and country! New York, having had the fortune to establish country supervision in 1841, and to abolish it in 1847, and re-establish a similar grade in 1856. But somewhere there has been most of the time some forward movement in legislation, aiding the college and the library, advancing methods, enforcing means to secure attendance or improve teachers, or reach the unfortunate by nature, and the neglected.

The same evidence of progress is observed in a glance at the profession of teaching, among whose pioneer schoolmasters the name of Ezekiel Cheever is so prominent. From one it has multiplied in number to over 200,000.

What has been the growth of the subjects of instruction, no colors can adequately picture, no figures tell. Beginning with reading and writing, the list stretches out to every field of knowledge, up to every height and down to every depth. Here again we see the providence and correct adherence of the fathers to those first principles from which progress was to be expected throughout the land and for all time. How early they provided for elementary teaching, grammar schools, and the establishment of Harvard College;—or the three great subdivisions of instruction still followed, elementary, secondary, and superior!\*

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\* Of the exact work performed in each grade we are left in doubt; but turning to the fuller German records of the time, we find that in 1618, at Coethen, schools were established that were a sort of model, affording instruction for six classes: for the first the teacher was a man of genial temperament, who was to form the language of his young charge, by daily prayer, committing verses of the Bible, and by running conversation; the second class read and wrote and attended to religion, using the book of Genesis; the third applied the rules of grammar in their reading and writing; the fourth and fifth classes undertook Latin, and the sixth class, Greek. But in 1620, Ratich, the teacher who had laid out this course, was imprisoned on the charge that he had not advanced the scholars as he

A grammar school was established at Dorchester, Massachusetts, in 1639, for instruction in English, Latin, and other tongues. Whatever was accomplished in the earliest secondary schools, they can hardly be presumed to have advanced beyond fitting students to enter Harvard, which was founded in 1638.

Admission there in 1642 required "so much Latin as was sufficient to understand Tully, or any like classical author, and to make and speak true Latin in prose and verse;" and "so much Greek as was included in declining perfectly the paradigms of the Greek nouns and verbs." For the first year the studies were, "logic, physics, etymology, syntax, and practice on the principles of grammar;" for the second year, "ethics, politics, prosody and dialects, practice of poesy and Chaldee;" for the third year, "arithmetic, geometry, astronomy, exercises in style, composition, epitome, both in prose and verse, Hebrew and Syriac."

President Quincy, in his "History of Harvard," says that very little exact and authentic information exists in relation to the course of studies and the degree of literary instruction in the seminary during this period; and first gives the course of studies of the fourth year for 1726, which required, besides arithmetic, recitations in "Allsted's Geometry, Gassenden's astronomy in the morning; go over the arts in the latter end of the year; Ames' medulla on Saturdays, and dispute once a week." Daily a portion of the Hebrew Scriptures was rendered into Greek in the morning, and in the afternoon parts of

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had promised, and was released only on his confession that he had vowed to do more things than he could accomplish.

Certainly no equal course was offered in the first American elementary schools. For the more advanced instruction of the time in Germany, we find that the curriculum of the gymnasium at Hersfeld (Hesse-Cassel) in 1630, offered work for four classes, and embraced Latin, Greek, Hebrew, arithmetic, and religion, music being taught in all the classes.

the English New Testament also into Greek. Required to declaim once a month, students were prohibited by the laws of the college using "their mother tongue except in public exercise of oratory."

Improvement came slowly until 1700. Indeed, President Mather, writing to Lieutenant-Governor Stoughton, characterized the students as forty or fifty children, few of them capable of understanding his morning and evening exposition of Scripture.

Stand on the same spot to-day and compare the standards of culture. The measure extends from the admission to the elementary public schools of Boston, through the close of the college course, on to the end of the special instruction given in the professional schools, clustering like the gems of a diadem around the college, — divinity, science, law, medicine, dentistry, mining, agriculture, — nay, still further, on to the termination of the University lectures.

How much does elementary, nay, secondary training now swell beyond the measure of that day! the bachelor of arts of 1642 could not matriculate in 1872. Contemplating the development of science since the beginning of American education, we realize that our fathers stood but on the threshold of knowledge.

Geography to their own observation comprised something of Europe and the ocean intervening, and a section only of the new continent elsewhere altogether undefined, now observed, and largely triangulated, surveyed, mapped, and filled up with cities and hamlets. The science of geography slowly developing on the track of human travels, had only for a century or so admitted the spherical form of the earth. Mercator, the Hollander, had but just published his measurements by degrees. Ortelius had only issued his atlas, "*Theatrum Mundi*," in 1603. Topography was only attempted.

Cook had not explored the Southern seas; Humboldt had not ascended the Andes, nor Livingston, pierced the wilds of Africa. A primary geography of to-day would challenge severe study before being understood by Columbus; and the end is not yet.

The settlement of Plymouth was only a century later than the triumph of Copernicus. Since that settlement Newton, Halley, Laplace, Herschel, and the bright constellations that have followed, have poured full light upon the night of that heavenly science.

Botany has multiplied the six hundred species of plants enumerated by the Greeks in the first century to tenfold the ten thousand species recorded by Linnæus in the eighteenth century.

History, though beginning in Eden, had not enacted some of its grandest and most instructive dramas. The modern writing of it had not been attempted. The large majority of its readers will not go back of what the last two and a half centuries have published.

Geometry had indeed already in its travels from early times in Egypt and Greece laid deep foundations and reared a grand structure, but Kepler did not introduce the idea of infinity into its language; nor Descartes add his contributions till near the end of the sixteenth century; while Newton's Differential and Integral Calculus, and the developments of Eucler and Legendre have been added since the founding of Harvard in 1638. Even algebra had received comparatively few of its practical applications. Witness the symbols of Vieta and Newton's binomial theorem.

Chemistry, rising from the mystical alchemy which obscured it, until the eighteenth century, now sheds its blessings in every household, on the farm, in the shop revealing to man the most valuable secrets of organic and inorganic nature.

Priestley did not discover oxygen until 1775, and Liebig, born in 1803, is still leading his followers to greater and greater triumphs.

When learning began its career in America, natural philosophy was hardly more than a subordinate topic under the general head of physics. Since the sixteenth century, the development of its principles and their practical application have revolutionized the world. Steam and electricity, powerless till 1800, are to-day the mightiest agencies for universal enlightenment and evangelization.

The great principles in zoölogy and comparative anatomy are of recent date, crowned by the still later labors of Agassiz under the auspices of the oldest American college.

But I forbear; and yet I should omit most essential proofs of the progressiveness of American education as found in the profession of teaching, did I not call to mind an additional fact or two.

Preparation for teaching was among our fathers altogether without special opportunities; persons prepared to be something else and became teachers as it happened. Ticknor suggested fitting young men for "school keeping" in 1789, and Rev. S. R. Hall, beginning at Concord, Vermont, in 1823, for several years delivered lectures to his pupils on school-keeping and school-government. In 1839 Cyrus Pierce, at Lexington, Massachusetts, opened the first normal school established under the auspices of the State. Only three pupils offered for admission. Now no system of education is considered efficient without their aid. Even private institutions seek to supply something of this training. Where could the teacher then look for the literature of his profession? Great teachers had lived and died, great schools flourished, great improvements been made; but the period of their flowering

into literature had not come, indeed is hardly yet arrived. Dr. Henry Barnard has done much to gather, preserve, and embody its materials.

Milton wrote his famous letter on education to Master Hartlib six years after the foundation of Harvard. The Picketts issued in New York in 1810 "The Juvenile Mirror," or "Educational Magazine," without any pompous editorial remarks. Bound, it has something of the appearance of an old New-England primer.

This first of educational magazines is now replaced by eighty-four periodicals devoted to various educational objects. The formal association of teachers for the advancement of education is altogether a recent practice, its grandest development being almost entirely within the memory of persons now living; yet out of these associations, begun perhaps in Middlesex, Connecticut, in 1799, springing up in every State and in so many cities and counties, and including church and Sunday-school gatherings, have come some of the most valuable measures and impulses promotive of educational progress. Still another auxiliary started in Connecticut in 1839 — the Teacher's Institute — is exerting a wide and beneficial influence.

Nor is a look at the buildings, text-books, and apparatus of that day and this less suggestive.

The first abode of the early college was often a single house, perchance a log cabin. Now, health, taste, convenience, and lavish expenditure rear in our villages and cities educational structures at once expensive and ornamental, exerting a most important educational influence, and many a country school-house is a gem of beauty, to be in many a memory a joy forever.

A recent writer credits Pestalozzi, who died in 1827, with the first use of the slate. Noah Webster says that, "before the Revolution, and for some years after,

no slates were used in common schools; all writing and the operations in arithmetic were on paper."

The change and multiplication of text-books is amazing. The Horn-Book and New England Primer once composed wellnigh the entire course of elementary instruction. Within a century, Dillworth's Spelling-book, Hodder's Arithmetic, and Pike and Murray and Morse and Webster have achieved their glory. What have taken their places, let the great publishing houses of to-day testify. The multiplication of aids in the way of apparatus is at this day beyond enumeration. The museum presents material nature and the history of mankind; the philosophical room displays the manifold relations and operations of matter; the laboratory reveals the mysterious forces and effects of elemental action; the microscope and telescope disclose at once bodies most distant and minute; while photography catches their forms, and presents with equal ease and accuracy mountains of the moon, apparent crests of the sun, and changes in molecular matter that must be magnified fifty thousand times to be perceived; and genius is touching canvas and marble for the inspiration of the people.

A single scrap from history will suggest the corresponding change in methods.

Judge Sewall's diary undoubtedly affords us an authentic illustration of college discipline at Cambridge. It occurred in 1674; the offence was "speaking blasphemous words." After examination by the corporation, the offence was submitted to the overseers for advisement. The offender was sentenced to be "publicly whipped before all the scholars," and "to be suspended from taking his bachelor's degree," and "to sit alone by himself uncovered at meals during the pleasure of the President and Fellows;" "to be obedient in all things,

and, in default, to be finally expelled from the college." The execution of the sentence was no less characteristic than its nature. It was twice read publicly in the library, in the presence of all the scholars, the government and such of the overseers as chose to attend. The offender having kneeled, the president prayed, after which the corporal punishment was inflicted; and the solemnities were closed by another prayer from the president.

The traditions of every family are full of the experience of other days in the elementary schools.

Our fathers saw the dawn; we are in the meridian blaze of educational facilities; but how do we stand in the comparison of results? They educated to produce character, and strove to make its possession by all the people the basis of national integrity. In this respect, is *our* record as honorable as theirs? They wrought in a narrow circle and with a selected community; but it is our privilege and should be our glory, that we may extend the blessings of education to millions, representing all ages, nationalities, and conditions of men.

Perhaps the most signal and wonderful evidence of this progress in results is the replacement of the institution of slavery in a large number of the States of the Union by schools and seminaries of learning. In these schools, introduced at the close of the late war by the charity of the North and the most wise and Christian action of the government through the Freedmen's Bureau, opened to all, but attended chiefly by those recently slaves, attendance has increased to hundreds of thousands; and systems of schools for universal education are undertaken by most of the States, in which formerly their instruction was prohibited by most severe penalties. The down-trodden are now the uprising, and higher they are climbing the hill of science, catching

perchance at the beginning a letter or figure on the run; classes are now well on in higher mathematics, and Latin and Greek, as at Nashville, Atlanta, Charleston, New Orleans, and receiving the college diploma as at Lincoln University at the rate of ten a year, and the diploma in law and medicine at Howard, while they come forward as teachers by the hundred.

There are instances of noble efforts on the part of those once supporters of the old order of things; we honor them; we point to them, to incite others to overcome their prejudice and folly. Many ex-confederate soldiers are teachers. The enthusiastic and faithful teacher of the colored high school at Petersburg, Virginia, was a member of General Lee's staff. The active State superintendent of schools in Alabama was a confederate officer, and the able State superintendent of Virginia was with the South. The superintendent of schools in Richmond, an adjutant in that city in their service, is devoting himself to the education of every child of every class with an enthusiasm and faithfulness worthy of all commendation. Petersburg has completed two new school-houses on an improved plan, one for white and the other for colored children. Richmond has transformed the large and spacious mansion of the late executive of the confederacy for the accommodation of scholars of the free public schools, and is erecting three new houses for the same purpose. Verily, war yields its laurels to the triumphs of peace!

These signal victories over prejudice add a peculiar charm to the progress of American education. Even Virginia, whose colonial governor once boasted that she had no free schools, now has open not far from 3,000.

Nor should the multiplication in numbers of institutions of learning be overlooked as a measure of progress. In the States where free schools were contemporaneous

with settlement, their number is only limited by the increase of population, while academies and high schools for secondary instruction are as numerous as cities and villages; and the institutions for superior instruction entitling themselves colleges, William and Mary following Harvard in 1693, Yale in 1701, Columbia in 1754, and the University of Pennsylvania in 1765, and collegiate institutions are numbered by hundreds; those for instruction in theology number ninety-three; in law, twenty-eight; in medicine and the associated departments of dentistry and pharmacy altogether eighty-eight; schools of agriculture are developing in every State, and here and there schools of mining and other institutions for special instruction in the application of arts and sciences to the industries of life. Nor should those institutions be overlooked, especially the outgrowth of Christian civilization, which seek to supply the loss of parents to orphans, to care for the neglected and outcast, and reclaim the juvenile offenders; which tax ingenuity, and overflow with charity in seeking to unfold the duties, relations, and beauties of this and the future life to the imbecile, the blind and deaf and dumb.

It should be remembered that the American education of which we note the progress is not a limited or distorted or diseased culture, but is complete and generous, and, as Milton justly says, "fits a man to perform justly and skilfully and magnanimously all the offices, both private and public, of peace and war;" in a word, the progress of the formation of American character, individual and national. We must make some note, therefore, of agencies not limited to the profession of teaching.

Contrast the effect of the conceptions of our country upon the growth of mind in our early history, and now. How limited and undefined then; how vast, exact in their outlines, and full of sublime suggestions now furnishing!

The foundations of an expanded and prevailing patriotism, with traditions and a history rarely equalled in human affairs to give it high endeavor and heroic endurance; — an arena offering pursuits how enlarged and multiplied; all open and free, whose honorableness is determined only by their rectitude; every child inherits the idea of room for enterprise, notions of relation which create hope and stimulate effort; in his daily pastimes on the streets he may make an acquaintance with the races of mankind that it cost Cook his voyage around the world to acquire; there need be "no pent-up Utica," save for the criminal and the idle; — his earliest observations teach him, so far as human responsibility goes, that each man is the architect of his own fortune, and he is led not to expect to reach heaven on flowery beds of ease, nor to travel the journey of life successfully in ancestral boots. "Labor conquers all things," "Excelsior," and similar maxims, springing from the very structure and order of society around him, fix themselves as life-mottoes on his banner, and if he is not a spoiled child, he is laboring and rising before he knows it. Knowledge is everywhere jogging his elbow and asking to be acquired. It is said of a member of the United States senate, greatly distinguished for his accurate and comprehensive knowledge of finance and commerce, that he began these acquisitions when a clerk in a store by tracing every article of merchandise that he handled to its origin, production, transportation, and consumption; his ideas were clear; his were object lessons. Thus every industry may become a school; the commonest arts and improvements of living speak an interesting and instructive language.

The handiworks of the Chinese since the inventive period of their history — like those of the bee — have repeated the same form from generation to generation. Not yet so here; the chimney, the stove, the simplest

utensils of the household and tools of trade, tell in yearly improvement their instructive tale of invention. The progress of commercial intercourse and the interchange of thought, now give youth advantage, then unknown to age.

The trip from Monticello to Philadelphia occupied Jefferson three weeks, and our fathers made their last will and testament preparatory to the journey from Boston to New York; now, we have over 53,000 miles of railroad, and are adding at the rate of 6,000 miles a year.

The boy of to-day crosses the continent in a week, makes a voyage around the world without alarm, and as soon as he can read, finds in the morning newspaper the universal transactions of the day previous.

The increase in the publications of our country flashes upon us in a few figures. The issues of 1637 were "The Freedman's Oath," "The Almanac and the Psalter," newly set to metre;—our annual publication of books alone now reaches 3,400; while of 3,377 books reported as published in Great Britain, not less than four hundred and twenty-six are credited to American writers. Already many eminent names have been graven on the tablets of an enduring literature.

Startling and more impressive is the progress of that great educational agency, the journalistic press. No member of congress would now boast that no newspaper was published in his district. The first newspaper in the English language was published in London, two years after the landing of the Pilgrims. The first in America, "The Boston Newsletter," in 1704, surviving 72 years, or till the stirring events of '76. A recent exhibit gives 6,056 different periodicals annually issued in the United States, publishing 1,463,551,539 copies. Moreover, on an average four start per day, and one suspends.

If the glances we have taken thus hurriedly, at this

picture and that, may suffice to characterize American education as progressive so far, we should not dismiss the subject till we hear some answer to the question, "What of the present, What of the future?"

The "Catholic World," in two recent articles, has pointed out the needs of the colleges of their denomination. The Baptists are vigorously discussing their statistics, and have held a series of conventions calculated to arouse effort among them in every department of training. The State Educational Convention of Alabama recently resolved by unanimous vote that the education of the colored race was a duty and a high privilege of the white race. The recent Ohio Convention set before itself and the public as objects especially to be sought:—

1. Judicious County supervision.
2. Normal Schools.
3. The township system of administration.
4. Elementary normal instruction in neighborhood institutes.

And at the last convention of educators in Massachusetts, Mr. Philbrick unfurled the banner inscribed with four special objects of pursuit and attention.

1. A fund from a State tax, to be distributed pro rata, according to the actual school attendance.
2. Subordinate supervision, county or district.
3. Additional provision for the professional training of teachers.
4. The universal instruction of all children of school age.

Oregon is adopting active State supervision.

California is opening her University to women, and making it free, and a few of her Christian men offering education to the sons of the "flowery land." Texas, the last State to act, falls into line by adopting a law providing for a vigorous system of free common schools, com-

elling the instruction of every child, and the State superintendent to every part of the land sends appeals "to come over and help."

Michigan opens her University to women, and adds by enactment that every child *shall* be educated. State legislature after legislature has had the same subject under consideration, and the debates of Congress are drawn more closely to vital public interests by the introduction of educational subjects. Massachusetts has for a year been teaching drawing to her children, and setting an example to the rest of the country. The Institute of Technology at Boston, and the Free Institute at Worcester, are pushing their illustrations of the benefits of separate institutions for special instruction in aid of the arts and industries. Many colleges, while holding fast to what they believe has been tried and found good, are adding new departments to satisfy rising demands.

Cornell is hopefully trying its great experiment. Harvard, already rejoicing in so large an introduction of the elective element, demands improvements that according to estimate cost \$350,000.

Charity is seeking out the most available forms in which to expend its surplus wealth for the promotion of learning; text-books, apparatus, methods of instruction are revised, from the college to the primary school. Nay, more; Miss Peabody goes to Germany to learn, and comes to tell us, in her discriminating statements, how even before the years of school life we may win the child by play methods to habits of thought and action that shall be correct for all future pursuits. All arts and sciences are on the stretch to evoke some additional secret from nature, that may be for entertainment or use or instruction to man. Few mornings pass that the telegraph, of which we have 180,000 miles in the United States, does not flash some new truth into the treasures

of knowledge common to the people of the country, from the heavens above or the earth beneath, while labor-saving patents at the rate of 13,762 in a year secure larger leisure in all pursuits for the culture of head and heart; these, all these agencies and so many others, add their impetus to the educational problems of the day, the successful solution of which shall give us a progress unparalleled by the past, absolutely assuring elementary education to every child, well born or ill born, from the imbecile to the genius, according to correct methods, and equally the continued growth of all the people in excellence of knowledge and conduct according to their opportunity.

It is said that Martin Luther, finding himself no ways aided by the opinions of his time, in his assault upon the degenerate traditions he encountered, was compelled to awake all antiquity to make a party against his age. Verily, American educators do not encounter this necessity. Every one of the immense activities for the betterment of mankind should be their ally. All the past comes to their support, either for encouragement or for admonition, while the future beckons them to a success limited only by the wisdom and energy of their endeavors. Forty millions of people rise as our national emblem is unfurled. The five or six millions of English-speaking people in 1700 have now multiplied to 77,000,000, speaking the same language and ruling hundreds of millions more; while affiliated races and those by emigration and immigration and commerce and missions brought under the influence of our thought and civilization swell the number beyond computation. If philology points to Central Asia as the origin of our race, the treaty of Washington offers new evidence of reunion between its elements, gives assurance of higher attainments and more full subjection of force to reason and

right in this branch of the human family; 77,000,000 of people speaking the same language, holding something of the same faith, having something of the same tendency to enjoy liberty and respect human rights, inhabiting all continents and so many islands, bound in strong internationalities, grasping hands fraternally across all waters, of whom 40,000,000, the greater part, are domiciled in this broad and beautiful land, at once the subjects of this progressive education and the agents by whom it is to be advanced!

Would it be difficult to imagine the angel of the nations waving his hand bidding American education forward and calling the great English-speaking people and their allies to possess the world, and hasten the day when one spirit shall prevail from the ends of the earth to the ancient home of their race? The fathers foreshadowed the result in their endeavor to cultivate character of the highest type in every child of every family, a purpose, alas! which has been defeated with regard to millions of our population. The experiment is now ours, the responsibility is on us, and the majority of mankind look on either in doubt, or assured of our final failure. Partial, sectional, sectarian, and partisan efforts, imperfect legislation, follies of parents and among school managers, and the incompetency of teachers, have already forced American education into too many fatal mistakes. There is a present tendency to act as if men once in school were wise enough of their own motion, without further thought or aid, to legislate, to organize, to determine courses of study and plans of school architecture: nay, to teach the young, as if to have taken a dose of medicine were the only qualification necessary for a physician. As a consequence, the success of the best educators is only partial; they are in constant anxiety and toil lest the simplest and most essential parts of their work for the culture of the young

when within the school-room, be turned to destructive rather than beneficial results. Here, health of body is sacrificed to some foolish or ignorant notion about seats, or circulation of air, or facilities for light or heat. There, health of mind suffers from corresponding folly with regard to motives, to study; or time is lost, and the taste of the young is nauseated by unfit methods of instruction; or patriotism is perverted by the treasonable uses of events in history; or the imagination is corrupted, the sensibilities diseased, the conscience debauched as to the distinctions between right and wrong, and the will either enervated by the non-use of its freedom or perverted by indulgence in obstinacy or disregard of its obligations. How often wise and faithful educators have as much to do to train the adult generation in the right ideas of school management as to make the influences of the school itself promotive of a sound mind and sound body in its pupils. Here, especially, is one of our American dangers; it brings to mind the habit of that man of piety, who, to save the time of asking grace at each meal, sought the divine blessing upon the whole barrel of pork. A parent's eating may effect the offspring but cannot forestall that function in the child; but in education how often do opinions and actions appear to be used on the principle that when one generation has been provided for, the work is at an end. Away with this fallacy and substitute in its place the conviction that, like the functions of physical existence, the whole work must be perpetually repeated. Each generation of youth must be trained in school, and each generation of adults in school management, and every one, child or adult, must be kept on the advance.

For this purpose, observations of all classes of facts, from day to day, in country and city, in state and nation, must be made, accumulated, and compared. If it is necessary to observe and report the movement of storms,

or to triangulate our coast and mark the points of safety and peril for the preservation of our commerce, can it be less important to observe what is safe and what is injurious in the education of American youth, and place these observations in the hands of school officers and teachers for their use? No other nation offers such an opportunity to embody and render useful to its own people, and all the world besides, the results of school experiments.

Have we hopes of universal liberty? They will pass into glorious fruition as we improve this opportunity, or perish as we neglect it. What a fund of wisdom the annual experience of such a country would afford! The nation would know at once the location and extent of any general omission of education. If these experiences were gathered from year to year, noting all the processes of the various elements and grades of culture in the vast field, we should everywhere begin to eliminate follies and evils, and reach certainties and wisdom; we might hope to know, as we do not now, how different necessities and considerations affect attendance, the relation of climate to study; how many hours are best for school work for the respective ages; how far education may increase or diminish insanity; then we might know with some definiteness the material value of education; the wealth-producing power of elementary and secondary instruction; and more definitely, the relation of superior education in all of its departments to the advancement of human welfare; no longer would the relation of intelligence to labor, or those of labor to capital, be left in uncertainty—the foot-ball of any caprice of blind passion or money when it may foolishly choose to be tyrannical. By this careful observation and accumulation of facts we should begin to see the sphere, the scope, and effect of the several great instrumentalities of education,

prevent their injurious conflicts and guide them into that harmony where the success of each shall be greater; however diverse and special their motives, objects, or methods, we should undoubtedly find them uniting and arraying themselves against those doctrines and agencies which leave man in ignorance, or the subject of his evil passions, or which incite to vice and crime.

Our danger in the regions of greatest educational activity, does not seem to be so much that ignorance will get the advantage of us by any direct and open action of its own, as by its accumulation, where education is chiefly neglected, as in cities, or at the South, or by the lack of proper understanding and harmony of those great agencies which in a civilized community are set down as in favor of education. We say the family, the church, all educational institutions are for education; that a republican government must be for education; that all principles requiring intelligence for their acceptance and all intelligent classes, must be in favor of education; that wealth, which is an impossibility in a high sense, in the night of barbarism, must be in favor of education; and that labor, whose skill and productiveness depend so entirely upon culture, must be in favor of education; we say, whenever our American bird is brought before an audience, the American people must be in favor of education. Alas! the educational efforts of too many stop with these declarations. And, as a matter of fact, when we come to a closer scrutiny, we discern that many families would only educate their own children and let all others grow up in ignorance, and that more would not teach their children at all; indeed, that the family, when the culture of the young has been intrusted solely to it, has left society in barbarism. We find the church, when assuming to itself all responsibility in man's education, has too often drifted into the opinion that only the

clergy, or kings, or specified classes needed any culture worthy of the name; that the business of the masses was to toil and believe what they are taught, and follow blindly as they are led; that it has set science in array against itself, becoming monkish and chaining learning to its own doors or diplomas, caring nothing for man as such in his universalities, but only for its own class or clan; we find that principles requiring intelligence for their apprehension once acquired, come to offer their possession as a reason for not entrusting others with the peril of testing them; we find that wealth considers the support of educational institutions a burthen, and declares taxation for the purpose a legal theft; we find that labor often becomes content with its degradation, and would sneer at and destroy any attempt of its own sons to rise above its level. We find that intelligent men often become the bitterest opposers of education. We find that our national government, in spite of the protest of Washington and others of its best founders, has been able for three quarters of a century to ignore education. until sectional ignorance has made it bleed at every pore, and we find among those who manage the American bird, and are most forward and affectionate in talking to us as "the dear people," some have such conceit of their own powers, and such a holy horror of the dangers of a little learning, that they are only satisfied if they are allowed to handle our eagle, and the dear people are kept in the distance to see it soar, and pay well for the sight, without grumbling and without directing its flight. The fathers, as if they saw all these evils, provided against them, not in such a way that any generation choosing could not fall into them, but so that any desiring to avoid them would certainly escape. How they sanctified the family and set it apart in its glory for rich and poor! To religious worship and organization

they gave freedom, so that from all nations the worshipper of whatever creed has hastened hither as to his place of refuge. Here, educational institutions of most independent action were established and encouraged; labor flourished and was honorable, because whatever is right is honorable; wealth accumulated so that the Old World sent its capital here for the most remunerative investments; and republicanism wherever pent up in the heart of man or people looked here for example, sympathy, and protection. They put all these forces to work, each according to its own self-directed efforts, whenever and wherever they chose to operate, leaving the settlement of their general direction for the public good to the prevailing sentiment of the people, but not committing to any chance or uncertainty the education of the people; for, upon the sentiment of the citizens depends whether they demand good or evil from these ideas or agencies. The fathers expected good of all these, and gave them the largest liberty; yet by the supreme colonial and state legislation, in the control of which all the people participated, they put all these agencies under bonds to support universal intelligence and virtue by solemnly providing systems of education for the instruction of every child. How did their opinions on these vital questions start as radii from central first principles, and give room that all American growth has not been able to fill! Had they our responsibilities, and did these agencies set down as aids to education, offer to defeat it by their own perversions, would they not charge us never to forget that the work must all be done on the individual, and that its success depends entirely upon him? The parent, the family, must act, but so only as to secure the right acquisitions, thought, action, or growth of the child. The community, church, district, or city must act, but only so as to promote the

right action of the family, the parent, and the child in co-operation. So the state must act, but bounded by the same limits; the nation must act, yet only so as to aid the work the child must do for himself, and to secure the more efficient co-operation with him of each of the subordinate units named.

American education proposes to make American freemen out of all born here as well as all coming hither; to make them all free, not by the permission of potentate or mere law, but free with that freedom with which universal Christian intelligence and virtue only can make them free.

If our fathers should have power to examine the figures of the census of 1860, and should discover the fact that of the population of school age (5 and under 20) about one half did not attend school, and that if these absentees had sought attendance, there were in the country neither school-houses to receive them nor teachers to instruct them, and should they further notice the fact that of the adult population probably about one in five could not read and write, and now that once more all men are freemen, and that all freemen are admitted to the jury box, the ballot box, to official position and the witness stand, how would they be shocked by the manifestly imperilled condition of the free institutions they so ardently cherished! Would they not remind us that ignorance with its train of evils is of all things the most impracticable and un-American? would they not invoke every agency of culture to fulfil to its utmost its obligations to every other, whether local or national, for the dissemination of sound learning and its benefits?

Among the facts which are forced upon our attention under this notice of the progress of American education, we find in the array of opposing forces meeting us every here and there, as we have already felt, the fact that the

greatest share of ignorance is sectional; three-fourths of the adult ignorant population in 1860 were in the South. How do the lessons we have been reaching aid us in meeting this great outlying difficulty so threatening of evils? On inquiring the cause, one word — "Slavery," formerly answered. Now, opposition to culture there offers various reasons. One says, "We are poor and cannot afford the expense. Portions of our country are sparsely settled and schools are impossible." But free common schools have neither failed in the West on account of sparseness of population, nor have schools failed in inclement Sweden and Norway where they secure the instruction of 97 per cent of the children. "We have had no experience in the management or the benefit of free common schools as conducted in the North; we do not understand them and do not want them." Another says, "I do not believe my property should be taxed to educate the children of other men." Another says, "The education of the negro will spoil him as a laborer;" and so on through the catalogue of objections that have been anywhere urged against free common schools. Intelligent men offer them; the private independent institutions of learning now in existence are interested in retaining their patrons and might lose them if free schools were established. The action of the churches in certain cases in their own behalf is opposed to the adequate effort of the state. Much of this opposition is honest, and is so far susceptible of removal by reason and argument.

But there is another manifestation, ignorant, blind, and passionate, guided by the prejudices which have grown up in the darkness of slavery, which is violent in its proscription, burns school-houses, whips and murders teachers and school officers. A few have recently settled there who are familiar from experience with free common

schools. But they are distrusted and too often despised. Besides, could they have their own way in directing the establishment of systems of education, their views would be as diverse as the systems under which they were instructed, and would date back ten, twenty, or more years, when imperfections existed in those systems which have now passed away. Nor is there any medium at hand for the correction of their opinions, or for the dissemination of educational information. The literature in regard to the origin and conduct of schools is, as a rule, wanting; but no effort there should be allowed to fail for want of aid.

And it should not be forgotten that every citizen in the midst of these difficulties and seeking their removal — just so far as he is under obligations to any other citizen, or to the nation itself — has a corresponding right to demand coöperation. On the other hand, every citizen, every dollar's worth of property, every state, county, and city, bears under the nation a relation to these facts, and yet each, in and of itself, can affect them only by the influence of a distant example, when brought to bear upon them. These difficulties are indeed sectional, and yet they are within the national relation. The charity and philanthropy of the more educated sections can of themselves no more accomplish the needed result than they could have carried on the late war through those glorious organizations, the Sanitary and the Christian Commissions, or by the equipment of companies and regiments from private means.

As necessary now as then, the great sentiments of Humanity and Christianity, doing all they may in their own way, should bring into action for this work of preserving liberty, as they did for saving the Union, the national functions, the power of appropriate national laws and administration. In this action is, I believe, the final and

comprehensive remedy, so far as it is to be found from without those suffering sections.

National educational organizations sustain a vital relation to these important responsibilities. There is, I am confident, a form and method of action for the general government, entirely constitutional, and accordant with our institutions and traditions. In the Department of the Interior, which is specially charged with the control of a variety of domestic affairs, you already have the Office of Education, required to collect and disseminate information on educational subjects and to suggest the best methods and systems. Strengthen this office adequately, give it the means to fulfil this function as occasion shall offer, and untold good will result.

The moral influence of the best work in the North will be disseminated in the South. The inspiration and the arguments so much needed may be supplied. But this is not adequate to the present necessity.

Five years constitute an elementary school generation. Already one in the South has passed into final ignorance since the government has been at work restoring order. To be sure, General Howard did vastly and nobly through the Freedmen's Bureau. But the country feels that the conditions of war have ended.

Some other form of effort must be devised into which the element of pecuniary aid must evidently enter. Many questions might arise about raising the necessary means by tax; but from the earliest days the nation has not questioned the right to use its domain for this purpose. The sale of public lands is now paying into the national treasury above all expenses a million or a million and a half annually. The General Land Office is also in the Department of the Interior under the same Secretary. Congress has only to enact that these net proceeds of the land sales shall be used in aid of educa-

tion. A measure involving this principle was advocated in the interest of certain States and carried through congress by the immortal Clay and his associates, and vetoed by the president. No such fate would now defeat similar congressional action. A president and cabinet of whole-souled devotion to the public welfare would give all their weight in favor of its most efficient execution. What was bestowed could be distributed through the local systems of education on condition that their privileges were free and universal, and that the sum thus expended be supplemented by required amounts raised by local taxation. Charity has already, through the example of the noble Peabody and skilful Sears, shown the wisdom of this course. Shall not all the other citizens of the country equal these in beneficence and wisdom? What home in all the South can fail to speak their names with kindness? What home in all that sunny land, so abandoned to calamity, could fail to come to feel kindly and loyally towards a nation that should do commensurately as nobly for their children? Is not this a sure way to peace, lasting peace? If the funds bestowed by the general government should be multiplied five or six times by local taxation as are those disbursed by the Peabody trustees, we might anticipate the entire expenditure for schools in those States would reach from five to seven millions annually. How soon this would multiply schools and teachers, improve all that pertains to education, increase wealth, multiply the comforts of life, and inaugurate a prosperity impossible under the conditions of civilization formerly enforced there! Can any citizen, any educator, so fail to see the

"Phantom army come,  
With never a sound of fife or drum,  
Keeping time to a throbbing hum  
Of wail and lamentation?  
The men whose wasted figures fill  
The patriot graves of the nation"—

as to reply, "This is no concern of mine;" while yet, too, the air is thick with the horrors of the Parisian massacres, and there are premonitions of a similar explosion in our own metropolitan city?

All are impatiently waiting for the results of the incoming census. We are permitted to know unofficially an item or two. Of each 1,000 adult persons in New Hampshire in 1860, only 24.6 could not read and write — the highest percentage of intelligence of any State in the Union. Now, her total population has decreased nearly 8,000; but the number of adults unable to read and write has at the same time nearly doubled, while there are 17,107 less children attending school.\* As a contrast in respect to growth, the population of Kansas has increased 250 per cent. and the number of adults unable to write has increased 600 per cent. From the census of 1860, the total number of pupils in the public and private schools of Florida, Georgia, Louisiana, Mississippi, North Carolina, Virginia, and West Virginia was 382,604. An approximate statement from the census of 1870 shows the number of pupils in the same States to be 369,635, a decrease of nearly 13,000 in school attendance, while the total population has increased 333,000. Certainly these early whisperings of the new census respecting the present condition of intelligence in the country are not calculated to lull any educator to sleep, even in the most favored sections, however he may ignore his obligations to coöperate in that progressiveness of education which shall make it universal and complete.

Does any individual or section, for any cause, indulge in indifference or inaction or opposition? the spirit of the progress which we have noted is irrevocably fixed, and looks only to final triumph.

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\* The census when completed for 1870 showed exactly 7,656 adults who could not write, against 4,898 adults who could not read and write in 1860.

This spirit is well illustrated by a declaration said to have been made by John Knox. Long imprisoned, emaciated with sickness, as the galley in which he was confined lay on the coast between Dundee and St. Andrews, he was asked if he knew the land within sight. He replied:—

“Yes, I know it well; for I see the steeple of that place where God first opened my mouth in public to his glory; and I am fully persuaded, how weak soever I now appear, that I shall not depart this life till that my tongue shall glorify his godly name in the same place.” And verily so it was.

Education has begun a work for man and God in America, which, whatever fortune may temporarily betide, will yet be accomplished.